# CONSUMPTION OF FOOD BY FARM HOUSEHOLDS IN NOVA SCOTIA 1945-1946





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DEPARTMENT OF AGRICULTURE

Marketing Service Economics Division

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## FOREWORD

This is one of three studies of food consumption by farm households in the provinces of Prince Edward Island, Nova Scotia and New Brunswick. It was undertaken by the Economics Division, Canada Department of Agriculture and the Nutrition Division, Department of National Health and Welfare in co-operation with the Nova Scotia Departments of Agriculture and Health. The field work was carried out by personnel of the co-operating agencies under the supervision of Mrs. Flora Webster Shefrin of the Economics Division, who also developed the index of economic level used in the study. The sample was designed with the guidance of the Dominion Bureau of Statistics. The technical advice received from many members of the staffs of other divisions of both the Canadian and provincial governments is also gratefully acknowledged.

To the co-operating farm families, and particularly to those who completed reports in the winter, special thanks are extended.

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## INTRODUCTION

The Canadian Council on Nutrition, which included representatives of not only the Dominion and Provincial Departments concerned with health but the Canada Department of Agriculture and other governmental and non-governmental groups of national scope interested in solving the Canadian nutritional problem, for some years urged that data relating to the diets of farm families be obtained. This survey of consumption of food on farms in Nova Scotia was consequently undertaken in conjunction with two other surveys in Prince Edward Island and New Brunswick. The purposes of this study were:

1. To measure as well as possible with the means available the adequacy of the diets of farm families in Nova Scotia and of particular groups among them;

2. To ascertain the extent to which farmers supply their own food.

Method.- In planning the sample, Nova Scotia was divided into five groups of counties. Each group consisted of those counties most alike in 1941 with respect to type of farming, gross farm income, racial origin, percentage of urban population, number and size of urban areas, percentage of population in school after age 13, availability of occupations alternative to farming, and geographic position. The counties included in each group are indicated in Chart 1. Within each group one county was selected at random to represent it. The counties thus selected were as follows:

1. Cumberland;
2. Halifax;
3. Kings;
4. Queens;
5. Richmond.

In order to secure representation of people of Dutch and German descent, part of Lunenburg was substituted for part of Queens. Only those households were included in the survey where farming was the main source, supplying at least half of the family income. Thus, the sample was not representative of all Nova Scotia farms as defined in the 1941 census. However, the exclusion of part-time farms probably resulted in a more satisfactory reflection of the food consumption by families whose principal source of income was agriculture.1/

To secure data for this study questionnaires as to the kind and quantity of food consumed during the previous week were used for three successive periods. August and September 1945 constituted the first survey season. Although 54

1/ Throughout this report the terms "household" and "family" are used interchangeably.

interviews were taken in October, the last of these covered the week ending October 4. In this survey period interviewers also obtained information about such factors as size of farm, cash income from each class of product, and living facilities, to provide a basis for classification of the households of the survey. During the winter of 1945-46, questionnaires were sent by mail to each family previously interviewed. Those questionnaires were limited to food consumption. They were returned over a period ranging from February to early April. Then in May the original households were visited again and records were taken of food consumed at that time.

It proved impracticable to secure reports from all families interviewed in the summer of 1945 for each of the subsequent survey periods. In the winter period, only 128 of the 237 original families supplied information, but in the spring, 213 did so.

Background of the Survey.- As the diet of a family is largely determined by its established eating habits and tastes, its knowledge of the nutrient values of various foods, and its current economic status, it is necessary to consider the reports of food consumption in the light of the economic situations prevailing at the time of the survey and in the preceding decade. Agriculture had not been as severely affected by the depression in Nova Scotia as in other provinces. Cash income from the sale of farm products dropped from $17 million in 1930 to $10 million in 1932 and rose to $19 million in 1938. While there was a sharp setback in 1939 and 1940, rapid progress reaching a peak of $28 million in 1944 had ensued. Thus at the time of the survey Nova Scotia agriculture was passing through a period of rapidly improving conditions. These changes undoubtedly influenced food consumption.

Another factor influencing the diet at the time of the survey was the existence of rationing of certain foods, combined with short supply of various other foods. Butter, meat, sugar and certain foods containing sugar, were rationed at this time. While the ration allotments were fairly liberal, nevertheless some families undoubtedly would have exceeded the allotments to a considerable extent had they been able to obtain additional supplies of these foods. Of course many families supplied much of their own meat and butter and thereby escaped the effective impact of the rations. Canned milk was in very short supply during 1945 and the early part of 1946, and it was impossible to secure this food without a doctor's certificate or other proof of necessity, except in certain areas.

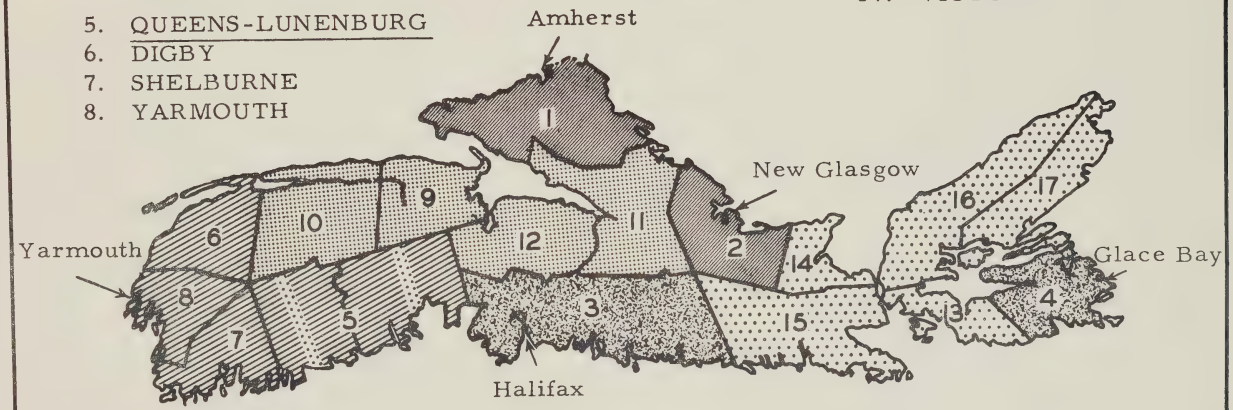
## NOVA SCOTIA FARM FOOD CONSUMPTION

In view of the multiplicity of individual foods it was necessary to group them into a few broad classes.1/ Various foods of the same general class were converted to common forms or components. For example, syrups of various types were grouped in the general class, sugars and syrups. But a thin syrup would have a much lower sugar content per pound than a heavy syrup or white sugar. Accordingly, the consumption of sugars and syrups was measured in

1/ The classification adopted was that used by the Dominion Bureau of Statistics in reporting Canadian food consumption.

REGIONS REPRESENTED BY SURVEY AREAS

1. CUMBERLAND
2. PICTOU
3. HALIFAX
4. CAPE BRETON
5. QUEENS-LUNENBURG
6. DIGBY
7. SHELBURNE
8. YARMOUTH
9. KINGS
10. ANNAPOLIS
11. COLCHESTER
12. HANTS
13. RICHMOND
14. ANTIGONISH
15. GUYSBOROUGH
16. INVERNESS
17. VICTORIA




NOVA SCOTIA FARM HOUSEHOLDS, 1945-46

terms of the sugar content in these foods. Following is a list of the food groups used in this analysis together with an indication of the common unit used:

1. Dairy products, excluding butter (milk solids);
2. Meats (carcass weight);
3. Poultry, game, and fish (edible weight);
4. Eggs (retail weight);
5. Fats and oils (fat content);
6. Sugars and Syrups (sugar content);
7. Potatoes (retail weight);
8. Pulses and nuts (shelled retail weight);
9. Tomatoes and citrus fruits (fresh equivalent retail weight);
10. Fruit other than citrus (fresh equivalent retail weight);
11. Leafy, green, and yellow vegetables 1/ (fresh equivalent retail weight);
12. Other vegetables 1/ (fresh equivalent retail weight);
13. Grain products (retail weight);
14. Beverages (retail weight).

Certain foods such as baking accessories, flavourings, seasonings, jelly powders, and a few food mixtures could not be readily included in any of the foregoing classes and consequently were grouped as an additional miscellaneous class of food.

To determine average consumption of each class of food by Nova Scotia farm families, the consumption as reported in the three survey periods was weighted according to the approximate number of months for which the diet of the survey week was considered to be representative. The weights 1/used were as follows:

1. August-September - 4.5
2. February-April - 5.0
3. May - 2.5

Comparison with Canadian Food Consumption.- In Table 1, a comparison is made between the quantities per person of similar food classes consumed by farm families in Nova Scotia as reported in this study and those quantities available for consumption to the Canadian population as a whole during the same crop year.2/ While the details of procedure for estimating the quantities available for consumption vary with specific foods, the general pattern is to start with production and imports and to deduct disappearance through export, industrial uses and waste. Adjustments are made for stocks on hand at the beginning and end of the crop year. As it is impracticable to secure exact data on production and on disappearance through waste, the estimates of Canadian consumption should be regarded as approximate rather than precise. For that matter, in view of the variation in the diet of farm families from week to week throughout the year, the estimates for Nova Scotia, especially with respect to foods varying in availability from month to month, such as eggs, fruits, and vegetables, may also contain a considerable margin of error.

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1/ Appendix.

2/ Dominion Bureau of Statistics. The Canada Year Book 1947. pp. 776-8. Ottawa 1947.

Table 1.- Weights a/ of Foods Consumed per Person per Week, Nova Scotia Farm Households, Compared with Weights Available to Civilians in Canada, 1945-46

| Foods | Pounds per person per week: Canada b/ | Nova Scotia | Nova Scotia as percentage of Canadian consumption |
|---|---|---|---|
| | - pounds - | | - per cent - |
| DAIRY PRODUCTS (excluding butter) c/ | 1.37 | 1.66 | 121 |
| Fluid whole milk d/ | 9.16 | 11.32 | 124 |
| Canned whole milk | .27 | .09 | 33 |
| Cheese | .12 | .13 | 108 |
| MEATS e/ | 2.62 | 1.92 | 73 |
| Beef e/ | 1.25 | 1.21 | 97 |
| Pork (excluding lard) e/ | .92 | .57 | 62 |
| POULTRY, GAME, AND FISH f/ | .51 | .76 | 149 |
| Poultry f/ | .48 | .27 | 56 |
| Fish, Total f/ | .17 | .60 | 353 |
| EGGS | .64 | .79 | 123 |
| FATS AND OILS g/ | .65 | .62 | 95 |
| Butter | .47 | .50 | 106 |
| SUGARS AND SYRUPS h/ | 1.48 | 1.06 | 72 |
| POTATOES | 3.76 | 5.57 | 148 |
| PULSES AND NUTS i/ | .23 | .31 | 135 |
| Pulses | .16 | .26 | 163 |
| TOMATOES AND CITRUS FRUIT j/ | 1.82 | 1.72 | 95 |
| Tomatoes j/ | .88 | .73 | 83 |
| Fresh citrus | .89 | .94 | 106 |
| FRUIT OTHER THAN CITRUS j/ | 1.85 | 2.90 | 157 |
| LEAFY, GREEN, AND YELLOW VEGETABLES j/ | .92 | 2.83 | 308 |
| Fresh | .71 | 2.40 | 338 |
| OTHER VEGETABLES j/ | .91 | 2.49 | 274 |
| GRAIN PRODUCTS | 3.63 | 4.63 | 128 |
| TEA AND COFFEE | .17 | .11 | 65 |

a/ Retail weight except where otherwise stated. Seasonal averages weighted as follows: August-September, 4.5; February-April, 5.0; May, 2.5.

b/ Year ended June 30, 1946.
Source: Department of Trade and Commerce. Dominion Bureau of Statistics. The Canada Year Book 1947. pp. 776-8. Ottawa. 1947.

c/ Milk solids.

d/ Includes whole milk equivalent of fluid cream and that used in ice cream for Canada. For Nova Scotia, fluid cream, skim milk and buttermilk are added to fluid whole milk but no adjustment is made for ice cream. Consequently, the quantities are not fully comparable.

e/ Carcass weight. Edible weight of offal is included in meats.

f/ Edible weight.

g/ Fat content.

h/ Sugar content.

i/ Shelled weight of nuts.

j/ Fresh equivalent weight. Includes the product in all forms, e.g., canned.

The consumption per person by Nova Scotia farm families in 1945-46 of milk solids in dairy products excluding butter appeared to be about one-fifth greater than the average consumption for all Canada (Table 1). Even in normal times the consumption of canned milk was low, as it is likely to be in normal times, since fresh milk is available on most farms. The quantity of cheese consumed per person was very similar to that for all Canada during the survey year. Cheese provided five per cent of the milk solids consumed and was generally a minor item in the diet studied.

Meat consumption at 1.92 pounds per person per week was only about three-quarters of the Canadian average. It is rather striking that beef constituted nearly two-thirds of the meat supply of the Nova Scotia farm families as compared with less than half the meat supply in the case of all Canadian families. Thus the consumption of beef was roughly equivalent to the Canadian average while that of other meats was only half the Canadian average. The consumption rates of veal and pork were much lower for the Nova Scotia farm families than for all Canada. The consumption of lamb and mutton was very low in Canada as well as on the Nova Scotia farms. Almost half the pork consumed was cured.

From the dietary viewpoint, low meat consumption may be offset by a high intake of other animal protein foods. This appears to have happened with respect to the Nova Scotia farm families. While the consumption of poultry was extremely low, only half the Canadian average, that of fish was very high, being three and one-half times the amount available per person to all Canadians. The farm egg consumption also compared favourably with the general average. The relatively heavy intake of dairy products supplied additional animal protein so that, on the whole, the Nova Scotia farm families appear to have consumed about as large a quantity of animal protein as other Canadian families.

Butter consumption at one-half pound per person per week was approximately the amount permitted by the ration at the time. In the absence of rationing more butter might well have been used.

Sugar consumption was limited by rationing and amounted to only three-quarters of the Canadian average for the period under study. Average Canadian consumption of sugar exceeded the ration as a result of the use of sugar in a number of manufactured foods which were not rationed. These foods included soft drinks, bakery products, ice cream and candy, which were undoubtedly purchased in smaller amounts by farm than by urban families.

Potato consumption in the area studied exceeded the Canadian average by almost 50 per cent. This heavy use of potatoes arose in part from the fact that nearly all of the survey families produced their own potatoes and consequently had an abundant supply.

The consumption of pulses and nuts was about one-third greater than the Canadian average. Dried peas and dried beans made up 84 per cent of the consumption of this class of food by the Nova Scotia families as compared with 72 per cent of the weight of the pulses and nuts group in Canada.

Nova Scotia farm consumption of tomatoes was lower, and of citrus fruit higher, than the averages for all Canada and the combined intakes were thus

approximately equal. The possibilities of growing tomatoes in the home garden apparently were not sufficiently satisfactory to lead to a relatively high consumption of tomatoes. It is significant that less than 15 per cent of the canned tomatoes eaten were home produced.

Consumption of fruit other than citrus by the families studied was about one and one-half times the amount available per person for all Canadians. As many of these fruits are produced throughout Nova Scotia, they were available to most of the farm families either at home or by purchase from neighbours at reasonable prices. As Canadian consumption figures of canned fruits do not include quantities home canned, they are not comparable with the data of the survey. The Nova Scotia families consumed almost twice as much dried fruit per person as did all Canadians, and this accounted for the greater part of the difference in total intake of fruit other than citrus.

Consumption of vegetables was extremely high as compared with the Canadian average, running to about three times the Canadian average for both leafy, green, and yellow and other vegetables. This high consumption was undoubtedly associated with home production. It is very probable that the summer survey was taken at the time of peak consumption of garden vegetables by most of the families involved. However, even the consumption of vegetables in May which for the survey families was the lowest month of the year for vegetable consumption, still remained 75 per cent above the Canadian average.

Families included in this study ate per person about one-quarter more grain products than were available to all Canadians. Four-fifths of the grain products used were purchased in the form of flour. Flour in bakers' bread represented an additional five per cent of the grain products. One-quarter of the remaining cereals were purchased in a prepared form while three-quarters of them were cooked at home. From the dietary viewpoint it is quite significant that the consumption of whole grain cereals exceeded that of refined cereals since the former retain vitamins and minerals lost in many of the more refined products.1/

Consumption of tea and coffee averaged about two-thirds of the amount consumed per person by all Canadian families.

In summary, the diets of the Nova Scotia farm families, in general, appeared to be considerably more satisfactory than the average for all Canada. The relatively low consumption of meats was offset by high consumption of other animal protein foods while the low consumption of sugars and syrups cannot be considered a serious weakness of the Nova Scotia diets. Highly refined sugars and syrups provide little else than carbohydrate in terms of nutrients, while many of the foods which were very abundant in the farm diets are important as suppliers of minerals and vitamins as well as of calories.

Seasonal Variation.- Consumption of the two classes of vegetables varied more widely by season than that of other food classes (Table 2). This is a

1/ Refined: defined as containing less than 0.4 mg. thiamine per 1,000 calories; Whole grain: defined as containing at least 0.4 mg. thiamine per 1,000 calories.

natural consequence of their abundance in farm gardens at the time of the summer survey as opposed to the limited quantity and variety stored until May. The fresh equivalent weight consumed of both these food classes halved from the first to the second period.

Table 2.- Seasonal Variation in Consumption of Food Classes, Nova Scotia Farm Households, 1945-46

| Food Classes a/ | Average weight consumed per person per week b/ | Proportion of Average Weight Consumed | | |
|---|---|---|---|---|
| | | August - September, 1945 | February - April, 1946 | May 1946 |
| | - pounds - | - per cent - | | |
| Dairy products (excluding butter) | 1.66 | 105 | 94 | 101 |
| Meats | 1.92 | 70 | 132 | 91 |
| Poultry, game, and fish | .76 | 88 | 109 | 103 |
| Eggs | .79 | 98 | 92 | 118 |
| Fats and oils | .62 | 97 | 103 | 95 |
| Sugars and syrups | 1.06 | 89 | 111 | 100 |
| Potatoes | 5.57 | 106 | 88 | 113 |
| Pulses and nuts | .31 | 84 | 119 | 90 |
| Tomatoes and citrus fruit | 1.72 | 95 | 105 | 98 |
| Fruit other than citrus | 2.90 | 89 | 124 | 73 |
| Leafy, green, and yellow vegetables | 2.83 | 132 | 92 | 57 |
| Other vegetables | 2.49 | 141 | 80 | 66 |
| Grain products | 4.63 | 100 | 101 | 98 |

a/ Dairy products are reported in terms of milk solids, meats in terms of carcass weight, poultry, game and fish in terms of edible weight, fats and oils in terms of fat content, sugars and syrups in terms of sugar content, nuts in terms of shelled weight, all fruits and vegetables in terms of fresh equivalent retail weight and all other foods in terms of retail weight.

b/ Average obtained by weighting as follows: August-September, 4.5; February-April, 5.0; May, 2.5.

Availability was a major factor in causing sharp seasonal changes in total consumption and varieties of vegetables consumed (Tables 3 and 4). Peas, snap beans, corn and cucumbers were eaten in considerable quantities in the summer but disappeared from the diet in other seasons. As a result carrots and cabbage together accounted for the greater part of the consumption of fresh leafy, green, and yellow vegetables and turnips for the greater part of "other" fresh vegetables in the winter and spring. Some beets, onions, and parsnips were stored for these seasons.

Meat intake was also highly variable by season. For meats, however, winter was the season of highest rate of consumption and summer the lowest. This was probably associated with the problem of storing fresh meat on farms in hot weather. Many farm families keep a good supply of fresh meat on hand in cold weather, but run short of it from time to time between shopping excursions in the summer.

Table 3.- Variation by Season in Relative Weights of Fresh Leafy, Green, and Yellow Vegetables Consumed by Nova Scotia Farm Households, 1945-46

| Kinds of vegetable | August-September, 1945 | February-April, 1946 | May, 1946 |
|---|---|---|---|
| | - per cent - | | |
| Cabbage a/ | 9 | 41 | 12 |
| Carrots | 35 | 47 | 86 |
| Greens b/ | 5 | 0 | 1 |
| Lettuce | 5 | 1 | 1 |
| Peas | 18 | 0 | 0 |
| Pumpkin and squash | 2 | 10 | 0 |
| Snap beans | 25 | 0 | 0 |
| Other c/ | 1 | 1 | 0 |
| Total | 100 | 100 | 100 |
| | - pounds - | | |
| Weight consumed per person per week | 3.64 | 1.89 | 1.14 |

a/ Includes sauerkraut.
b/ Spinach, Swiss chard, and dandelion greens.
c/ Green celery, green lima beans, broccoli, and green onions.

Table 4.- Variation by Season in Relative Weights of "Other" a/ Fresh Vegetables Consumed by Nova Scotia Farm Households, 1945-46

| Kinds of vegetable | August-September, 1945 | February-April, 1946 | May, 1946 |
|---|---|---|---|
| | - per cent - | | |
| Beets | 14 | 8 | 3 |
| Corn | 33 | 0 | 0 |
| Cucumbers | 29 | 0 | 0 |
| Mature onions | 4 | 13 | 9 |
| Parsnips | 0 | 10 | 9 |
| Yellow turnips | 17 | 66 | 77 |
| Other b/ | 3 | 3 | 2 |
| Total | 100 | 100 | 100 |
| | - pounds - | | |
| Weight consumed per person per week | 3.40 | 1.66 | 1.40 |

a/ Appendix, page 34.
b/ Cauliflower, mushrooms, radishes, and white turnips.

The high variability of the rate of consumption of fresh fruit other than citrus was related to its availability. Apples were the most important fruit of this class in every season even though most varieties were not yet mature when interviewing began in the summer (Table 5). Berries, other than blueberries, had passed their peak by the time of the summer survey but were not yet ripe in May. However, some families did have fresh rhubarb then. Bananas were relatively important as a fresh fruit in May.

Pulses and nuts were also consumed in the greatest quantities during the winter. Such foods as pea soup and baked beans have a stronger appeal in cold weather than hot.

The relatively large quantity of eggs eaten in May was no doubt associated with their relative abundance and low price at this time of year. The maximum range of variation in egg consumption may not have arisen between the survey periods selected.

Table 5.- Variation by Season in Relative Weights of Fresh Fruit Other than Citrus Consumed by Nova Scotia Farm Households, 1945-46

| Kinds of fruit | August-September, 1945 | February-April, 1946 | May, 1946 |
|---|---|---|---|
| | - per cent - | | |
| Apples | 61 | 89 | 49 |
| Bananas | 5 | 9 | 38 |
| Blueberries | 13 | 0 | 0 |
| Grapes | 2 | 0 | 0 |
| Peaches | 3 | 0 | 0 |
| Pears | 8 | 0 | 0 |
| Plums | 2 | 0 | 0 |
| Raspberries | 2 | 0 | 0 |
| Rhubarb | 0 | 0 | 12 |
| Other a/ | 4 | 2 | 1 |
| Total | 100 | 100 | 100 |
| | - pounds - | | |
| Weight Consumed per person per week | 1.49 | 1.12 | .44 |

a/ Blackberries, cranberries, foxberries, strawberries, and watermelon.

The consumption of potatoes was lowest in the winter and highest in the spring. The high level of consumption reported for the spring may be in part due to greater waste in preparation for cooking.

Consumption of sugars and syrups and of poultry, game, and fish both increased by about 20 per cent from summer to winter.

While the total consumption of citrus fruit and tomatoes varied little with season, that of citrus fruit increased fairly sharply from summer through winter to spring. This increase was offset by a decrease in tomato consumption. Canned tomatoes were in short supply in the spring of 1946.

The variations between seasons suggest that the diet of the farm families was less satisfactory with respect to foods rich in vitamins and minerals in May than in either of the other seasons. However, in another month the variety and quantity of fresh fruits and vegetables would again start to increase.

Retail Value of the Diet.- In terms of retail prices prevailing at the time of each survey period, the value of the food consumed per person was about $3.60 in the first two seasons as compared with about $3.10 in May. The main cause of this decline would appear to be the sharp decrease in the consumption of fruit other than citrus and of all classes of vegetables except potatoes and pulses in the spring as compared with the summer and winter periods. While quantities eaten of some other foods increased, such increases were not sufficient to offset the decline in consumption of fruits and vegetables, some of which had a fairly high retail value.

Variations between the three survey periods in the relative importance of food classes consumed, in terms of retail value are summarized in Table 6. The sharpest change occurred in the two classes of vegetables. Their value dropped from 18 per cent of the total food cost in the summer of 1945 to five per cent of the cost of the diet in the spring of 1946, one reason being that the kinds of vegetables available in the winter and spring were lower priced than were most of the important summer vegetables. Meat and fruit other than citrus were considerably more important items in terms of retail value in the winter than in the other two seasons. This was a result of the heavier consumption of these two classes of food. Likewise, reduced consumption of dairy products, eggs, and potatoes reduced their relative value in the winter. The increase shown in the relative values of sugars and other sweets and of grain products between the summer and the spring survey periods arose primarily from the decrease in the total value of food consumed as changes in physical amounts consumed of these products were relatively small.

Meats were the most important food class in terms of retail value in the diet except in the summer season when meat consumption was very low relative to the other two survey periods. Meats, together with the associated food classes of poultry, game and fish, accounted for 18 to 28 per cent of the value of the diet according to the period of survey. Dairy products, excluding butter, were the next most important food class, representing almost one-sixth of the value of the diet in each season. Fats and oils, mainly butter, amounted to about eight per cent of the value of the diet. Eggs were not quite as important in terms of value as fats and oils. The foregoing classes of foods, all of which are mainly animal products, together made up about half of the total value. Of the remaining nine food groups, grain products were the most important, followed by fruit other than citrus. Each of these amounted to about eight per cent of the value of the diet. Each of the remaining food classes, except pulses and nuts, averaged over the three seasons, represented from four to six per cent of the total value.

Table 6.- Seasonal Variation in Percentage Distribution of Retail Value of Food Consumed by Food Class, Nova Scotia Farm Households, 1945-46

| Food classes | August-September 1945 | February-April 1946 | May 1946 |
|---|---|---|---|
| | - per cent | | |
| Dairy products (excluding butter) | 15.6 | 13.6 | 16.4 |
| Meat a/ | 11.4 | 21.2 | 17.5 |
| Poultry | 4.0 | 3.0 | 1.6 |
| Game | .2 | .1 | .2 |
| Fish | 2.6 | 3.5 | 4.3 |
| Eggs | 7.5 | 5.2 | 7.0 |
| Fats and oils a/ | 7.4 | 7.4 | 9.1 |
| Sugars and other sweets | 4.4 | 4.5 | 5.7 |
| Potatoes | 5.2 | 3.2 | 5.0 |
| Pulses and nuts | .6 | 1.4 | 1.0 |
| Tomatoes and citrus fruit | 5.0 | 5.1 | 5.9 |
| Fruit other than citrus | 6.6 | 8.9 | 6.1 |
| Leafy, green, and yellow vegetables | 9.2 | 4.6 | 3.3 |
| Other vegetables | 8.5 | 2.4 | 1.9 |
| Grain products | 7.1 | 9.6 | 8.3 |
| Other | 4.7 | 6.3 | 6.7 |
| Total | 100.0 | 100.0 | 100.0 |
| | | - dollars - | |
| Value of food consumed per person per week | 3.59 | 3.58 | 3.09 |

a/ Very fat salt pork excluded from meat and included in fats.

Not included in retail value of the food consumed are certain mineral and vitamin products, chiefly fish liver oils. Expenditure on these products was small. It amounted to less than two cents per person in the summer and spring periods as compared with five cents in the winter.

Use of Home Produced Foods.- The diets of low income farm families tend to be superior to those of urban families of the same economic status because farm families use more home produced foods. This is especially true in periods of depression when many families are obliged to minimize their expenditure on food. Even in periods of prosperity, urban families are unlikely to attain as high levels of consumption of such foods as dairy products and certain fresh fruits and vegetables as those families who have an abundance of them on their own farms. The utilization of home produced foods may lower the cost of farm diets and may also improve their quality. The vitamin content

of certain fresh fruits and vegetables is lowered in the process of marketing, while farm families use these products directly from their garden. Nevertheless when certain vegetables are stored on farms which have no refrigeration facilities, the quality at the time of consumption may be lower than that of similar products retailed in cities. Of the farms included in the survey only 27 per cent had refrigeration of any kind. In evaluating the advantages of home production of perishable foods on farms, it should be borne in mind that many farm families have poor access to retail outlets for such foods and have no suitable facilities to store large quantities or even only a week's supply. Consequently without home production much less fresh fruit and vegetables would probably be consumed.

Approximately half, in terms of value, of all the food consumed by the Nova Scotia farm families interviewed was home produced (Table 7). The proportion home produced of certain classes of foods was much greater, exceeding 90 per cent for potatoes, poultry, game, and eggs. While virtually all the milk, cream, skim milk and buttermilk consumed were home produced, the purchase of cheese, canned milk, and ice cream pulled down the proportion for dairy products to 85 per cent. Nearly 60 per cent of the meat used in the winter season was homeproduced but the bulk of that consumed in both the spring and summer was purchased. Consequently only 45 per cent of the over-all consumption was produced at home.

At first sight it may be somewhat surprising that only one-third of the butter consumed was produced at home. However, at the time of this survey farmers probably purchased more of their butter than they normally do since there was a subsidy on cream paid by the Government of Canada to keep down the retail price of butter. If the farmer sold his cream and purchased butter back from the creamery, he received the benefit of this subsidy with the result that the amount which he paid for the butter only exceeded by a very small margin the amount which he received for the cream used to produce it. The small amount of other fats produced at home consisted primarily of lard and very fat salt pork.

Home produced sugars and syrups were limited to honey and maple products, neither of which accounted for a very large proportion of the total value.

While one-third of all the tomatoes consumed were produced at home, tomatoes constituted only one-quarter in terms of value of the class, tomatoes and citrus fruit. Over half of the fruit other than citrus, but less than 15 per cent of each of the two major classes of vegetables, was purchased. The great bulk of other home produced foods consisted of jam, jelly, and pickles, from home grown fruits and vegetables.

Table 7.- Proportion of Home Produced Food Consumed in Terms of Retail Value, Nova Scotia Farm Households, 1945-46

| Foods | Total value of food consumed per person per week a/ | Value of home produced food per person per week a/ | Proportion home produced b/ |
|---|---|---|---|
| | - dollars - | | - per cent - |
| Dairy products (excluding butter) | .52 | .44 | 85 |
| Meat | .58 | .26 | 45 |
| Poultry and game | .11 | .11 | 94 |
| Fish | .12 | .02 | 16 |
| Eggs | .22 | .20 | 90 |
| Butter | .22 | .08 | 36 |
| Other fats | .05 | .01 | 25 |
| Sugars and syrups | .14 | .01 | 6 |
| Potatoes | .15 | .14 | 95 |
| Pulses and nuts | .04 | .01 | 26 |
| Tomatoes and citrus fruit | .18 | .02 | 8 |
| Fruit other than citrus | .26 | .12 | 45 |
| Leafy, green, and yellow vegetables | .21 | .18 | 86 |
| Other vegetables | .16 | .14 | 90 |
| Other c/ | .52 | .04 | 8 |
| Total | 3.48 | 1.78 | 51 |

a/ Average obtained by weighting as follows: August-September, 4.5; February-April, 5.0; May, 2.5.

b/ Apparent discrepancies arise from use of fractions of cents in making computations.

c/ Includes grain products, bakery products, beverages, jam, jelly, and pickles. The home produced portion was almost exclusively jam, jelly and pickles. The total value of such foods was allocated to home production if their fruit and vegetable content was home produced.

In terms of value, dairy products, excluding butter, were the most important class of home produced foods, accounting for one-quarter of the total (Table 8). Meat, eggs, and leafy, green, and yellow vegetables each exceeded in value one-tenth of this total. Other relatively important classes of home produced foods were potatoes, "other" vegetables, fruits, poultry, and butter.

Variations among the three survey seasons in the relative importance of various classes of home produced foods were quite sharp. Meat which accounted for only four per cent of the home produced food in the summer of 1945, rose to over one-quarter of the value in the following winter. On the other hand the relative importance of both classes of vegetables dropped sharply from the summer of 1945 to the winter and following spring. These changes are

easy to explain. Many farmers butcher in the winter and use large amounts of home produced meats in that season when the surplus on hand may be kept frozen but in warm weather they purchase the bulk of their meat. During the summer survey period the variety of vegetables available in farm gardens was at its peak while only stored or canned home grown vegetables were available during the other two periods. Other variations by time of survey in the relative values of home grown foods may be found by examination of Table 8.

Table 8.- Percentage Distribution of Home Produced Foods in Terms of Retail Value, by Season, Nova Scotia Farm Households, 1945-46

| Food classes | Percentage of retail value of home produced food | | | |
|---|---|---|---|---|
| | August - September, 1945 | February - April, 1946 | May, 1946 | Average a/ |
| | - per cent - | | | |
| Dairy products (excluding butter) | 23.6 | 23.4 | 30.9 | 24.7 |
| Meat | 4.1 | 25.9 | 14.4 | 14.6 |
| Poultry | 6.4 | 5.9 | 3.6 | 5.7 |
| Game | .3 | .3 | .1 | .2 |
| Fish | .8 | .9 | 2.0 | 1.1 |
| Eggs | 11.9 | 9.6 | 14.1 | 11.3 |
| Fats | 4.5 | 4.5 | 7.7 | 5.1 |
| Honey, sugar, and syrup | .2 | .5 | 1.0 | 4.5 |
| Potatoes | 8.8 | 6.5 | 10.0 | 8.0 |
| Pulses | .3 | .8 | .5 | .5 |
| Tomatoes | 1.3 | .5 | .3 | .8 |
| Fruit | 6.9 | 7.3 | 4.6 | 6.7 |
| Leafy, green, and yellow vegetables | 15.4 | 7.4 | 4.5 | 10.4 |
| Other vegetables | 14.1 | 3.7 | 3.1 | 8.1 |
| Other b/ | 1.4 | 2.8 | 3.2 | 2.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| | - dollars - | | | |
| Total value of home produced food consumed per person per week | 2.04 | 1.73 | 1.41 | 1.78 |

a/ Weights used: August-September, 4.5; February-April, 5.0; May, 2.5.
b/ Mostly jam, jelly, and pickles.

Another significant fact shown in Table 8 is the decline in the value of home produced foods from $2.04 per person per week in the summer of 1945 to $1.41 in the spring of 1946. This decline was, of course, associated with the decreased amounts of home produced fruits and vegetables used in the latter

period as compared with those of the summer when they were in abundant supply. Consumption of poultry was also relatively low in the spring. The value of home produced eggs also declined somewhat since spring prices were lower than those of the late summer.

Home Preserved Foods.- Home preservation of food has certain advantages in addition to those of home production. These advantages include:

1. Savings through preserving during season of lowest price;
2. Use of products which might otherwise be wasted;
3. Utilization of labour, which might not otherwise be gainfully employed, in the preservation of home produced foods;
4. Consumption of preserved foods when fresh foods of the same kind are scarce;
5. Preserving at the stage of best development of the product, especially home grown foods;

Computed on a per person per week basis, consumption of home preserved foods tends to be rather minute. For families included in the current study its value amounted to only $0.25 per person per week or about seven per cent of the total value of the diet. Almost 90 per cent of all the home preserved foods used were preserved from home grown produce or that such as game, fish, and wild berries secured from natural sources. Seasonal variation in consumption of home preserved foods was quite marked. The rate of consumption of home preserved foods in the winter was five times as great and in the spring almost four times as great as in the summer.

Data are presented in Table 9 as to the relative importance of various home preserved foods excluding those derived from purchased foods. Cured pork was by far the most important item, and its value plus that of the home produced corned beef amounted to nearly two-fifths of the whole. Canned fruits and vegetables including tomatoes each represented about one-sixth of the home preserved foods. Other important items among home preserved foods were pickles and canned meat, poultry, and game.

Seasonal variations in the relative importance of home preserved foods may be noted by study of Table 9. Those which appear are generally associated inversely with the availability of the corresponding fresh product in the season involved. Thus, the consumption of canned fruit and vegetables was at its peak in the winter season. The value of home canned meat, poultry, and game consumed varied little with season but it appears to be relatively important in summer as quantities of other home preserved foods were low then. Consumption of home cured pork increased in the winter and spring periods as more families had supplies on hand in these seasons than in the summer. It is usually cured in the fall or late winter.

Table 9.- Percentage Distribution of Retail Value of Various Home Preserved Foods a/, Nova Scotia Farm Households, 1945-46

| Foods | August-September 1945 | February-April 1946 | May 1946 | Average b/ |
|---|---|---|---|---|
| | - per cent - | | | |
| Corned beef | 1 | 11 | 6 | 9 |
| Cured pork | 18 | 27 | 41 | 29 |
| Canned meat, poultry, and game | 21 | 6 | 9 | 8 |
| Cured fish | 3 | 2 | 1 | 2 |
| Canned fish | 1 | 1 | 0 | 1 |
| Canned tomatoes | 1 | 2 | 1 | 2 |
| Canned leafy, green, and yellow vegetables | 1 | 13 | 7 | 11 |
| Other canned vegetables | 2 | 4 | 4 | 3 |
| Canned fruit | 11 | 20 | 14 | 17 |
| Dried fruit | 1 | 0 | 0 | 0 |
| Jam and jelly | 15 | 4 | 5 | 6 |
| Pickles | 25 | 10 | 12 | 12 |
| Total | 100 | 100 | 100 | 100 |
| | - cents - | | | |
| Value per person per week | 7 | 35 | 26 | 23 |

a/ From home produced foods.
b/ Value of food consumed per person weighted as follows: August-September, 4.5; February-April, 5.0; May 2.5.

Savings by the Use of Home Produced Foods.- Estimated savings from the use of home produced foods depend largely on the theory used as to the nature of such savings. It may be argued that these savings consist of the difference between cost of production and cost of purchase. The savings estimated on the basis of this theory might well prove to be negative. In any event, it would be impracticable to estimate the cost of production of the numerous foods produced at home by farm families involved in this survey. Further, purchase prices for many of them would not be available as they would probably be bought from neighbouring farmers at prices considerably lower than urban retail prices. Another theory, equally tenable, would estimate these savings as being the difference between the retail value of the home produced foods and the actual cash outlay for their production.

In the following analysis, a third theory will be used as to the nature of these savings, namely, that they constitute the difference between retail value in urban markets and sale value at the farm level. Farm-to-consumer

margins have been computed for a number of important Canadian agricultural products.1/ Table 10 has been prepared on the basis of estimates developed in the above mentioned study of margins on milk, butter, beef, eggs, and potatoes.

Table 10.- Comparison of Retail and Farm Values of Certain Home Produced Foods Consumed by Nova Scotia Farm Households 1945-46

| Foods | Value of home produced food consumed per person per week a/ | Margin 1946 b/ | Saving per person per week | Proportion of value of home produced foods consumed a/ |
|---|---|---|---|---|
| | - cents - | - per cent - | - cents - | - per cent - |
| Milk c/ | 51 | 49.4 | 25.2 | 25.2 |
| Butter | 9 | 24.1 | 2.2 | 4.5 |
| Meats d/ | 37 | 35.1 | 13.0 | 17.9 |
| Eggs | 20 | 23.3 | 4.7 | 9.9 |
| Potatoes | 14 | 37.6 | 5.3 | 7.1 |
| Total | 131 | | 50.4 | 64.6 |

a/ Weighted averages as reported in Table 7 except that: (1) fluid dairy products are valued at urban rather than estimated farm purchase prices, with consumer subsidy included in fluid milk price and (2) cream subsidy added to price of butter.

b/ Hillhouse, F.W. and Schrader, F.M. Marketing Margins for Selected Canadian Agricultural Products 1935-1949. p. 8. Department of Agriculture. Economics Division, Ottawa, 1950.

c/ Includes cream, skim milk and buttermilk.

d/ Includes poultry and game. Margin applicable to beef assumed to apply to all meats.

According to Table 10, the farm value of the above home produced foods consumed on the Nova Scotia farms was $0.50 per person per week less than their urban retail value. They accounted for 65 per cent of the retail value of the home produced food. If similar margins existed on other home produced foods, the total saving would have amounted to $0.78 per person per week or approximately 21 per cent of the value of all food consumed.2/

1/ Hillhouse, F.W. and Schrader, F.M. Marketing Margins for Selected Canadian Agricultural Products 1935-1949. Department of Agriculture. Economics Division, Ottawa, 1950.

2/ Dairy products evaluated as in Table 10.

## VARIATION BY CLASS OF HOUSEHOLD

In an effort to relate features of the diet to other characteristics, families included in the survey were classified on the following bases:

1. Survey area;
2. Type of farm;
3. Proportion of food produced at home;
4. Number and age of children;
5. Education;
6. Economic level;
7. Value of food per food-cost unit 1/ per week.

National origin was not related to the diets of the families studied, as classification on this basis did not yield groups satisfactory for comparison. Over 60 per cent of those included in the survey sample were of British origin. The remainder of the families were either of mixed origin or formed groups which included too few families to yield statistically reliable data.

Detailed analysis of the weekly diet on the basis of each of the above classifications is provided in Tables 13 and 14 in the appendix. The data in this table reveal many small divergences of individual classes from the survey average.2/ In the course of the following discussion, attention will be called only to the more important of these divergences. In considering such differences, the ratio of the amount consumed per food-cost unit by a class of household to that by all survey households may be of more interest than the absolute quantity consumed by the specific class. Nevertheless, both figures should be considered. For the less important foods, quantities consumed per food-cost unit per week tend to be minute and the divergences, extremely small in absolute terms, may be very large in relative terms. Where adequacy of the diet, rather than a comparison with that of another class, is being considered, it is the quantities consumed which are important, since the average consumption of any food class by the farm households did not necessarily coincide with the quantity required for an adequate diet.

Survey Area.- As previously stated, the areas of survey were as follows: Cumberland, Halifax, Kings, Queens-Lunenburg and Richmond.3/

The time of interviewing in the summer affected the reported consumption of certain food classes in the different areas. Kings County was visited in August. Later in August the survey party moved to Halifax County. In September, Queens-Lunenburg and then Richmond, the latter running into a few days of October,

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1/ A food-cost unit is equivalent to a moderately active man. See appendix.

2/ Some caution is required in interpreting data in Table 13 as the number of households included in some classes is quite small. For such classes there is a danger that one or two families with an extremely high or low consumption of a specific food will have an undue influence on the average computed for the group.

3/ See page 1.

were completed. All interviews in Cumberland were taken between the first and fifth of October, inclusive. Thus, at the time of the survey in Kings County peas and beans were abundant but corn, tomatoes and apples were not yet ready for use in large quantity. In September peas and beans became less plentiful while corn, tomatoes and apples matured. Consequently, variations in the consumption of the food classes embracing the above products arose in part because of the time of interview in the summer period. Figures for survey area classes of household were influenced most but some groups in other classifications were closely linked with particular areas and consequently figures for them were also affected. Average rates of consumption of tomatoes, fruit other than citrus, and vegetables are therefore omitted in Table 13 and the rates for each season are presented in Table 14.

The retail value of food consumed per person per week in Halifax County was $3.12 as compared with $3.71 in Kings County and a survey average of $3.48. In the other survey areas the value of food consumed per person per week deviated only slightly from the survey average.

In view of the relatively low retail value of the diet in the Halifax area, it is not surprising that the quantities consumed of many foods were below the average for all the farm families surveyed. Major exceptions to this were: bought bread, fresh fruit other than apples and citrus, whole fluid milk, beef and eggs. Bakers' bread was a relatively minor item in the diet in all areas but in Halifax County the average consumption of half a pound per food-cost unit per week was one and two-thirds times the survey average. The relatively high consumption of bakers' bread by this group of farm families was probably mainly due to proximity to a major city. As the consumption of apples by Halifax County families was relatively low in both winter and spring it is unlikely that the time of survey was the principal reason for the low summer consumption. Halifax families reported the consumption of large quantities of fresh blueberries at the time of summer interviews when this fruit was abundant. Even so, their total consumption of fruit other than citrus was only average in summer. It was low in the other two seasons. The high consumption of whole fluid milk in Halifax County was offset by a very low intake of other dairy products and likewise that of beef was offset by a low consumption of other meats. Thus the intakes by Halifax County families of both dairy products and meats were roughly equivalent to those by all families of the survey.

Leafy, green, and yellow vegetables were almost the only class of food in Kings County for which the computed weighted average quantity consumed per person was exceptionally large compared with that of the farms as a whole. The value of such vegetables eaten on the Kings County farms in the first season was 58 cents but for all the survey households it was only 32 cents per person per week. This accounted for 17 of the 23 cents by which Kings County exceeded all survey farms in (weighted) average value of all food per person per week. Although part of that excess value was due to the time of survey the winter reports showed Kings County to be next to Queens-Lunenburg in consumption of leafy, green, and yellow vegetables. Furthermore, the time of the summer interviews in Kings County resulted in low rates of consumption of apples, tomatoes, and probably of vegetables other than leafy, green, and yellow, so that the average value of foods reported may not be unduly biased.

Intake of total milk solids differed very little from one survey area to another. Likewise that of fluid whole milk varied little except that in Halifax County it was about 25 per cent above the survey average. Nevertheless, consumption of fluid cream varied sharply being four times as great per person per week in Cumberland as in Halifax. Intake of skim and buttermilk ranged even more widely, rising from virtually none in the Halifax area to almost two pounds per person per week in Queens-Lunenburg. Canned milk and cheese consumption also varied sharply by area, Halifax being lowest for both of these products.

Meat consumption approximated one and three-quarter pounds per food-cost unit per week in Cumberland, Kings, and Queens-Lunenburg but was two and one-third pounds in Richmond. There appears to be a fairly significant variation in meat preferences associated with geographic area. Thus, Halifax County was highest in beef consumption of any area and lowest in pork while Queens-Lunenburg was lowest in beef consumption and matched Richmond in being highest in pork. Richmond was the only area in which quantities of veal and mutton or lamb consumed per food-cost unit were appreciable. Approximately one-seventh of a pound of each was eaten per food-cost unit per week. Although veal consumption in Richmond was only half that of Canada in the crop year 1945-46 the Richmond consumption of lamb and mutton exceeded the Canadian average by 60 per cent.

Total consumption per food-cost unit per week of poultry, fish and game ranged from 0.4 pounds in Halifax County to 1.2 pounds in Richmond County. The Halifax area had the lowest poultry consumption and Cumberland the highest with three times the Halifax average. The range in the consumption of fish was similar to that of poultry and Halifax was again lowest but Richmond was highest. In fact, the average consumption of fish per food-cost unit per week in Richmond was more than double that of any other area. Cured fish amounted to 70 per cent of the fresh edible weight of the fish eaten in Richmond County.

Variations in consumption of eggs, fats and oils, sugars and syrups pulses and potatoes, in relation to survey area, were not very marked. Halifax County had the heaviest consumption of eggs, Richmond of butter and sugars and syrups, and Queens-Lunenburg of potatoes and pulses. Halifax was almost one-fifth lower than the survey average in fats and oils owing to the low consumption of butter noted previously and Richmond was equally low in pulses.

Consumption of tomatoes and citrus fruit was much lower in Halifax than in the other survey areas and was only about 80 per cent of the suggested allowance for a good low cost diet.1/ Consumption of this food class in any other area did not vary more than ten per cent from the survey average. The apparently high consumption of tomatoes in Cumberland and low consumption in Kings during the summer may have arisen largely from the time of interviewing. However, the divergences from average in tomato consumption in Halifax and Richmond Counties were chiefly due to variations in quantities used of canned tomatoes.

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1/ Department of National Health and Welfare. Nutrition Division. Healthful Eating. Ottawa. 1952. p. 24. Recommended allowance 1½ pounds per week per person seven years of age and older.

As already mentioned the reported consumption of apples in the summer depended largely on the time of survey. Kings was visited in the middle of August when very few apples were being eaten, and Cumberland at the beginning of October when apples were abundant. It is quite probable that the rate of consumption in any specific week was higher in Kings, an apple producing area , than in any other area. The likelihood of this is confirmed by the data for winter and spring.

In general the variations shown in consumption of leafy, green, and yellow vegetables during the summer season may have been as closely associated with time of interview as with survey area. In Richmond, however, a low rate of consumption was reported in all seasons and greater emphasis on such vegetables would apparently improve the diet in that area. In Kings, on the other hand, a high rate of consumption was reported of leafy, green, and yellow vegetables in all seasons, while in Queens-Lunenburg consumption was high in the winter and spring, and may have been as high as in Kings in August. The high consumption reported for Halifax in the summer may have been due to the earliness of its survey as the quantities eaten per food-cost unit were low in other seasons.

The very wide variation reported in the use of other vegetables in the summer season was undoubtedly influenced by the date of interview. By the time the survey party reached Queens-Lunenburg, corn and turnips were being used generously, whereas their supply had been limited when Kings and Halifax Counties were visited. In Queens-Lunenburg consumption of this "other" class of vegetable, which included corn and turnips, was relatively high in the other two seasons, as well as being extremely high in summer. Halifax County was low in the consumption of vegetables classed as "other" in all seasons. As Halifax County was also very low in the consumption of tomatoes particularly in the winter and spring and below average in that of leafy, green, and yellow vegetables, the likelihood of a dietary deficiency in that area is suggested.

Consumption of total grain products varied little by region. However, the practice of buying bakers' bread appears to have been prevalent to a much greater extent in Halifax and Cumberland than in the other survey areas, especially Queens-Lunenburg. All areas used more whole grain than refined cereal products other than flour. Of the survey areas Cumberland had the highest consumption of whole grain cereals and the lowest consumption of refined cereals. Richmond families, on the other hand, used the greatest amount per food-cost unit of refined cereals, particularly of corn meal, macaroni, and rice, but with a heavy total consumption of cereals they were also second highest in that of the whole grain type. Queens-Lunenburg had the lowest consumption of cereals other than flour, being below average in that of both types. Of the cereals other than flour eaten the proportion cooked was highest in Richmond and lowest in Kings.

The proportion of the value of food consumed which was home produced ranged from 48 per cent in the Halifax and Kings areas to 55 per cent in Queens-Lunenburg. The value of home produced foods per person per week was actually 30 per cent higher in Queens-Lunenburg than in Halifax since the total consumption of food as well as the proportion of home produced was higher in the former area than in the latter.

From the foregoing comparison of the diets of families interviewed by survey area, it would appear that diets in the Halifax area were generally

inferior to those in the other areas. In particular the consumption of fruits and vegetables which are sources of important vitamins and minerals was generally low in the Halifax area. There may also have been some deficiency in this regard in Richmond with its very low consumption of leafy, green, and yellow vegetables, but this area was much more satisfactory than the Halifax area with respect to tomatoes and citrus fruit. The diets of the other three survey areas would appear to have been generally satisfactory.

Type of Farm.- For purposes of analysis, farms included in this survey were divided into commercial and non-commercial. On the former, sales of agricultural products in 1944 amounted to at least $600. Commercial farms were classified as:

1. Potato;
2. Vegetable and fruit;
3. Dairy;
4. Mixed.

Other classes too small in number to yield reliable data were omitted. The basis of this classification was the dominant source of income. For example, over 50 per cent of the gross receipts from agricultural products on a potato farm were derived from potatoes. For a mixed farm no one agricultural product accounted for over one-half of the gross receipts. On the non-commercial farms the average gross cash farm income plus revenue from work off the farm, boarders, etc. was $551. Non-commercial farms with such income amounting to less than $551 were denoted as "low income" and others were termed "non-commercial, higher income".

A number of the groups classified by type of farm were closely connected with certain survey areas and similarities in food consumption between the related groups naturally appeared. Approximately 85 per cent of both the potato and fruit and vegetable farms of the survey were found in Kings County. On the other hand, only about ten per cent of the dairy farms were in Kings and about the same number were in Richmond. The mixed farms were concentrated in Queens-Lunenburg which contained almost half of them. Many of the non-commercial farms in Richmond County had fishing as either the main or a supplementary source of income. Two-thirds of those in the "higher income" and two-fifths of those of the "low income" class were in Richmond. A considerable number of non-commercial farms were situated in Queens-Lunenburg.

The range in the value of the diet, on the basis of classification by type of farm, was wider than where classification was based on survey area. It was from $2.85 per person per week on the potato farms to $3.92 on the vegetable and fruit farms. None of the other four classes deviated by more than ten per cent from the survey average of $3.48.

Despite the low average value of their diet, families on potato farms consumed more than the average of cream, pulses, citrus fruit, whole grain cereals and prepared cereals (Table 13). Potato and egg consumption rates were below average and amounts consumed per food-cost unit of other foods except fluid milk and leafy, green, and yellow vegetables were decidedly low (Table 14).

Consumption rates of grain products and of a number of minor food items were below average on the fruit and vegetable farms but these families were average or better in their consumption of most other foods. This accounts for the high value of their diet.

There was little variation related to type of farm in the consumption of total milk solids or of fluid whole milk. It was somewhat of an anomaly, however, that the consumption of cream was much higher on potato farms than on dairy farms. The low consumption of cream, skim milk and buttermilk on dairy farms may be related to the marketing of fluid whole milk on many of them with the accompanying use of whole milk rather than of these products. There was a very wide variation in the consumption per food-cost unit per week of skim milk, buttermilk and canned milk which in general direction tended to offset the smaller variation in the consumption of fluid whole milk. The intake of cheese per food-cost unit was twice as great on the non-commercial higher income farms as on the potato farms but deviated little from the survey average of roughly two ounces per food-cost unit per week for other classes of farms.

Consumption of meat ranged from 1.3 pounds per person per week on the potato farms to about 2.2 pounds on vegetable and fruit and non-commercial higher income farms. Variations in beef consumption followed the same general pattern as those in over-all meat consumption but were less sharp. On the other hand, families on the non-commercial higher income farms ate three times as much pork per food-cost unit per week as did those on the potato farms. The rate of intake of poultry, game, and fish was also twice as high on the non-commercial higher income as on the potato farms, but other classes were relatively close to average. On both types of non-commercial farms poultry consumption was very low while fish consumption was very high as compared with rates on other types of farms. As fishing was a source of income on many of the non-commercial farms, fish was readily available. On vegetable and fruit and on dairy farms the consumption of poultry was relatively high.

Of any classification on basis of type the potato farms had the lowest consumption per food-cost unit per week of eggs, fats and oils, and sugars and syrups. Consumption rates of these foods by families on farms of other classes deviated little from survey averages, except that those on the non-commercial, higher income type of farm had a relatively heavy consumption of fats and oils. There was a rather wide variation by type of farm in consumption of specific foods within the above food classes, especially of molasses. The heaviest consumption of pulses occurred among families on the potato farms and the lightest among those in the non-commercial higher income bracket.

The consumption of tomatoes and citrus fruit ranged from one and one-third pounds per food-cost unit per week on the potato farms to two and one-half pounds on the vegetable and fruit farms. While interviewing on most of the potato farms in August before home grown tomatoes were available may have substantially lowered the reported consumption for the summer season, it is noteworthy that the potato farm families ate considerably less tomatoes than the Nova Scotia average in the other two seasons. The families on the vegetable and fruit farms had the largest rates of consumption of both tomatoes and citrus fruit.

Consumption of fruit other than citrus was low on potato farms and high on mixed farms in all three seasons. Families on dairy farms were relatively high, and those on non-commercial low income farms low, in their consumption of these foods in the first two seasons only. The reported consumption of apples in summer for various types of farm was undoubtedly affected by the time of interviewing. In particular, it would seem unlikely that the low consumption reported for August on potato, and vegetable and fruit farms continued far into September as the winter data showed a sharp increase. There was a rather wide variation in the quantities of canned fruit consumed. The greatest quantities were eaten on vegetable and fruit and dairy, and the smallest quantities on the two types of non-commercial and potato farms.

The reported consumption of leafy, green, and yellow vegetables was high on the mixed, potato, and vegetable and fruit farms in the summer. As most of the two latter groups were visited in August their relatively high consumption may be attributed in part to time of survey. In the winter the families on both mixed, vegetable and fruit farms used large quantities per food-cost unit of such vegetables and in the spring highest consumption rates were reported from the vegetable and fruit and potato farms. "Other" vegetables were eaten in largest quantity per food-cost unit on the mixed farms in both the summer and the winter survey periods. Incidentally, the families on vegetable and fruit farms used much more canned vegetables than did those on any other class of farm.

Families on potato farms used only four-fifths as much grain products per food-cost unit as the average for all the Nova Scotia farm families interviewed. They had the lowest consumption for any type of farm not only of grain products but also of flour, bakers' bread, refined cereals and cereals to cook. Nevertheless, they had the greatest consumption of whole grain cereals and prepared cereals per food-cost unit of families on any type of farm. Families on vegetable and fruit and on the non-commercial low income farms bought bakers' bread to the greatest extent.

The proportion of the value of food consumed which was home produced varied little with type of farm. In each group, except the mixed and non-commercial low income groups, this proportion was 49 or 50 per cent. The largest proportion home produced was 54 per cent on the mixed farms. Variation in the actual value of home produced food per person per week was somewhat wider, being from $1.41 on potato to $2.02 on mixed farms.

Families on potato and non-commercial farms had relatively low cost diets. Their consumption of fruits and vegetables was generally low and this may well have led to deficiences with respect to some vitamins and minerals in their diets. Families on the vegetable and fruit farms probably had the best over-all diet.

Proportion of Food Produced at Home.- In order to probe the relation between the proportion of food produced at home and the nature of the diet, families included in this survey were grouped into three classes according to the extent of use of home produced food. These classes consisted of those who produced at home less than 40, 40 to 59, and 60 per cent or more of their food in terms of retail value.

While there was some increase in the value of the diet as the proportion of food produced at home increased, this change was so slight as to be of doubtful significance. However, there were sharp variations in the quantities consumed per food-cost unit of certain foods and food classes.

Those who produced 60 per cent or more of the food consumed at home had consumption rates of skim milk and buttermilk, cream, and poultry more than double those of the group who produced less than 40 per cent of their food at home (Table 13). However, all three of these foods were used only to a minor extent in the diet. More significantly the consumption of milk solids, excluding butter, increased by about two-fifths as the proportion of food produced at home increased from less than 40 to 60 per cent or more. In the summer when fresh garden produce was available, consumption rates of fresh fruit other than citrus, leafy, green, and yellow vegetables, and other vegetables rose rapidly as the proportion of the diet produced at home increased (Table 14). This relation was less marked in the winter and did not appear in the spring. Tomato consumption also increased in the summer with home production but decreased in the spring. The only other important foods for which consumption increased as home production increased were potatoes, eggs, and pork. The increase in each case was approximately one-fifth of the amount consumed by the class producing the least food at home.

Consumption of certain purchased foods decreased as production at home increased, that of canned milk falling to one-eighth and of bakers' bread and canned soups dropping to less than one-half, of the amounts reported by those families who produced the least at home. Other foods whose consumption decreased as the proportion of food produced at home increased from less than 40 to 60 per cent or more of total value of food, ranked according to relative extent of reduction, were: citrus fruit, dried fruit, beef, refined cereals, tea and coffee, fish both total and cured, sugars and syrups, prepared cereals, and total meats.

As a result of the heavy consumption of fresh fruits and vegetables, dairy products excluding butter, and eggs, those who produced the most food at home may have had the best diet of the three classes in this analysis. However, in view of the greater consumption of citrus fruit, dried fruit, meat, and fish by those families who produced the smallest proportion of their food at home, any such superiority was probably slight.

Number and Age of Children.-1/ The number of individuals in the household and their ages affects food requirements and the economic burden of meeting them. For an analysis of the relation between diet and household composition, the families included in this survey were classified consisting of adults and:

1. No children;
2. One or two children under 13;
3. More than two children under 13;
4. One or two children 13 or over;
5. More than two children with at least one in each age group.

The retail value of the diet per food-cost unit per week varied from $3.13

1/ Eighteen years of age or under.

for the class with two or more children of which at least one was in each age group, to approximately $3.90 for the households with none or only one or two young children. The food of the other two classes was worth about $3.55 per food-cost unit per week.

As children require more milk and, excepting pre-school children, as much tomatoes and citrus fruit as adults, the data of the consumption of these foods as related to number and age of children in the household are presented on a per person rather than on a per food-cost unit basis.

Households including more than two children with at least one in each age group included many of the largest families interviewed. Such households consumed per person no more milk including canned, skim and buttermilk than those consisting of adults only (Table 11). Other classes of families including children did have a higher per person intake of milk. Families with no children or one or two small children ate the most tomatoes and citrus fruit per person.

Table 11.- Weights a/b/Consumed of Certain Dairy Products, Tomatoes, and Citrus Fruit per Person per Week, as Related to Number and Age of Children c/, Nova Scotia Farm Households, 1945-46

| Class of household | Persons per household d/ | Pounds per person per week: Fluid Whole milk | Skim and buttermilk | Canned milk | Tomatoes | Citrus fresh fruit e/ |
|---|---|---|---|---|---|---|
| | - number - | | | - pounds - | | |
| Number and Age of Children c/ | | | | | | |
| None | 3.4 | 8.45 | 1.46 | .09 | .86 | 1.01 |
| 1 or 2 under 13 | 4.6 | 10.05 | 1.18 | .05 | .70 | 1.12 |
| More than 2 under 13 | 6.7 | 10.15 | .71 | .16 | .87 | .76 |
| 1 or 2, 13 or over | 5.4 | 12.37 | .21 | .03 | .60 | .84 |
| More than 2, at least 1 in each age group | 7.7 | 8.74 | 1.09 | .13 | .60 | .84 |
| All farm households | 5.0 | 9.55 | 1.03 | .09 | .73 | .94 |

a/ Retail weight except where otherwise stated.
b/ Seasonal averages weighted as follows: August-September, 4.5; February-April, 5.0; May, 2.5.
c/ Eighteen years of age or under.
d/ August-September, 1945.
e/ Fresh equivalent weight.

Those families with no children consumed the average amount or more per food-cost unit of every major food class included in the analysis (Tables 13 and 14). They were at least ten per cent above the survey average in their intake of a number of major food classes, namely, meats, poultry, game and fish, fats and oils, fruit other than citrus, other vegetables, and tea and coffee. However, their consumption of no major food class, other than tea and coffee, exceeded the survey average by as much as one-fifth although their intake of certain foods exceeded it by as much as one-third. In their consumption of whole milk, sugar, refined and prepared cereals they were ten per cent or more below average.

In all major food classes households with one or two children under 13 had rates of consumption per food-cost unit very near the survey average. Among the major classes the largest deviation was with respect to poultry, game, and fish which was 13 per cent above average. Such families were 20 per cent or more above average in consumption per food-cost unit for the following specific foods: cured fish, bakers' bread, prepared cereals and canned soups. They did not fall far below the survey average in consumption of any food except canned milk. Viewed as a whole their diet was thus somewhat more satisfactory than the average of all families interviewed.

Families with more than two children under 13 had the highest consumption per person of milk solids from dairy products excluding butter of any of the household composition classes. Such households consumed 4½ quarts of fluid dairy products other than cream per person per week as compared with the minimum requirement of 3½ quarts of milk per week for a child under 13.1/ Families in this group were more than ten per cent below the Nova Scotia survey average in their consumption per food-cost unit of the following food classes: pulses, leafy, green, and yellow vegetables, grain products, and tea and coffee. The amount consumed per person of tomatoes was high, exceeding the survey average by almost 20 per cent, but that of citrus fruit was correspondingly low. The general over-all diet of this class of household was less satisfactory than that of the two preceding classes.

The diet of families with one or two children 13 years or older did not appear to be quite as satisfactory as that of families with one or two younger children. Those in the former class ate 13 per cent less tomatoes and citrus fruit per person than the average for Nova Scotia. On the other hand their intake of five quarts per person per week of fluid dairy products other than cream was 18 per cent above the survey average. As the adults included in this group probably drank less milk than the adolescents there can be little doubt that on the average the minimum requirement 2/ of 5 1/4 quarts of milk per week for children over 13 was generally met. Their consumption rates per food-cost unit of cream, pork, molasses, canned vegetables, and tea and coffee were rather sharply below the survey averages. It is probable that higher intakes of apples and vegetables classed as "other" would have been reported had a larger proportion of the summer interviews been taken in September.

The most striking feature of the food consumed by those households with more than two children, at least one in each age group, was that in no major food item was the survey average per food-cost unit exceeded by as much as ten per cent. Such families were generally large, averaging almost eight persons per household. Consequently, for at least some of them, cost probably limited the consumption of many food classes. Quantities of tomatoes and citrus fruit consumed per person by this class were 88 per cent of the survey average. While their intake of fluid dairy products other than cream was only five per cent below average the large number of children included in these households rendered their milk requirements relatively high. Their consumption per food-cost unit ranged from about 75 to 90 per cent of the survey average for the following general classes of food: meat, fish, poultry, and game, eggs, fruit other than citrus, and vegetables other than leafy, green, and yellow, and tea and coffee (Tables 13 and 14). In fact, for all the foregoing food

1/ Canada's Food Rules.
2/ Ibid.

classes, they had the lowest consumption rates of any group based on household composition. Low consumption of many specific foods was naturally associated with that in their related food classes. It is, nevertheless, worthy of note that the consumption by these households dropped to one-third below the survey average with respect to only the following foods of those listed in Tables 13 and 14: poultry and bakers' bread, and in two seasons, apples and other non-citrus fresh fruit.

As might be expected there was very little variation in the proportion of food produced at home in relation to household composition. The groups with smallest families, consisting of those with no children or one or two small children, had the most costly and in some respects the best diets among the classes based on household composition. Families with more than two children with at least one in each age group had the least costly diet, the curtailment in quantities consumed being rather evenly distributed among many foods and food classes. The other two classes fell about half way between these extremes in both value of diet and consumption of many basic foods.

Education.- To probe the relation, if any, between education and the dietary practices of the families interviewed, data were secured on the education of both the farm operator and his wife on each farm included in the sample. On the basis of these data, the education of each family was rated except in a few instances where information supplied proved inadequate for this purpose. For purposes of rating, a completed high school education was represented as 3, partial high school education as 2, complete elementary education as 1, and uncompleted elementary education as 0. Additions to these basic scores were made for other types of education and training. The ratings of husband and wife were combined to determine that of the family. On this basis, about half of the interviewed families had an education score of 2. Consequently, for analysis the lower ratings were combined in one class and the higher ones in a third class.

As the educational level rose, the consumption of fluid whole milk increased from eight to 11 1/3 pounds per food-cost unit per week (Table 13). This sharp increase in the intake of fluid whole milk led to a lesser increase, in relative terms, of milk solids. The only other foods of which consumption tended to increase as education rating rose were poultry and prepared cereals.

On the other hand the consumption rates of the following foods tended to decrease as education rating rose: canned milk, pork, fish, potatoes, grain products, flours, and cereals to cook. All the foregoing were low cost foods.

Of most other foods, consumption per food-cost unit varied little with education. Strangely, families with the middle education rating had the lowest consumption of tomatoes in all seasons. Intakes per food-cost unit of cream, cheese, meat, and sugars and syrups were not only lowest at the middle education level but also highest at the lowest level.

Neither the total retail value of food consumed nor the proportion produced at home varied significantly with level of education. Indeed, increased education did not appear to affect the diet materially except for increasing the consumption of milk and prepared cereals and decreasing that of certain low cost foods. While consumption of poultry increased with educational

rating it would appear probable that other factors correlated with educational level such as economic status, and to some extent type of farming, affected this relation.

Economic Level.- A wide variety of factors associated with economic level have a bearing on food consumption. To consider the combined effect of a number of such factors about which it was practicable to obtain information, an index of economic level was prepared. The factors used in this index were, in order of importance: value of farm, quality of housing and possession of certain facilities, gross family income, education, labour on farm, participation in farm and home organizations, and area of farm. On the basis of this index, the economic level of each family for which sufficient data were available was rated. Then, the third of the families with the lowest rating were classified as low and the third with the highest rating as high. The range in score for the medium group was very narrow with the result that comparisons between the two extreme groups are more indicative of differences related to economic level than are comparisons between the medium and the other groups.

As might be expected, the value of food consumed per person per week tended to increase somewhat with the economic level, the values being $3.40, $3.27 and $3.87, respectively, for the low, medium, and high classes. There was a slight tendency for the proportion of the diet home produced to increase as the economic level rose, the proportions being 50, 52 and 53 per cent of the value of the diet for the low, medium and high classes, respectively.

Families at the high economic level consumed over twice as much poultry per food-cost unit per week as those at the low level (Table 13). Other foods of which consumption increased as economic level rose included milk solids, fluid whole milk, eggs, pulses, citrus fruit, fruit other than citrus, leafy, green, and yellow vegetables, and bakers' bread (Table 14). The only foods listed of which consumption decreased sharply with rising economic level were fish and molasses. The combined effect of these increases and decreases was an improvement in the quality of the diet as economic level rose. Certainly, there was a more satisfactory supply of various minerals and vitamins in the diets of those families of the highest economic level than in those of the lowest level.

Value of Food per Food-Cost Unit.- There was a wide range in the retail value per food-cost unit per week of the diets studied. While some of the variation was undoubtedly associated with the tendency of certain individuals to under- or overestimate the quantities of food eaten by their families, much of it was associated with a genuine variation in diet. To determine what differences in the consumption of food classes and specific foods were associated with differences in total value of food consumed the households were sorted into the following classes according to value of food per food-cost unit per week:

1. Less than $3.00;
2. $3.00 to $3.99;
3. $4.00 to $4.99;
4. $5.00 or more.

Variation in the cost of a diet may arise from either of the following causes:

1. Differences in the total amount of food consumed;
2. Differences in the relative composition of the diet involving the substitution of cheap for expensive foods.

The first of these two causes appears to have been the more important. The quantity of food consumed per food-cost unit increased as the value of the diet increased for every food and class of food included in the analysis in Table 13. However, this increase was erratic with respect to fluid whole milk, canned milk, molasses, pulses and bakers' bread. Although the second class, with a value of food from $3.00 to $3.99, had the highest consumption of milk per food-cost unit per week of any of the four groups the variation among the last three groups was small. In general, it is evident that the intake of every basic food nutrient increased as the value of the diet increased.

Nevertheless the relative importance of specific food classes changed as the values of the diet changed (Table 12). The value of meat, poultry, and game, tomatoes and citrus fruit, fruit other than citrus, leafy, green, and yellow vegetables, other vegetables, and various preserved foods consumed showed a tendency to increase in importance relative to that of the diet as the total value of food consumed per food-cost unit increased. This is what one might expect, since these foods are not concentrated sources of calories and therefore are not substitutes for basic energy foods.

Food classes which represent relatively low cost sources of calories, such as fats and oils, sugars and other sweets, potatoes, and grain products, tended to decrease in relative importance as the total value of the diet increased. The same was true of eggs, bakery products, beverage materials, and miscellaneous foods. Nevertheless, the value of each of the above foods was highest for those whose diet was worth $5.00 or more per food-cost unit per week, and decreased for each lower food value class. Thus it would appear that the main differences in the values of the diets studied lay in a lower consumption of all classes of food by those who had the lowest valued diets, rather than the substitution of low price foods for higher priced foods.

Table 12.- Percentage Distribution of the Retail Value of Food Consumed, by Value of Food per Food-Cost Unit per Week, Nova Scotia Farm Households, 1945-46

| Foods | Value of food per food-cost unit per week: Less than $3.00 | $3.00-3.99 | $4.00-4.99 | $5.00 or more |
|---|---|---|---|---|
| | - per cent - | | | |
| Dairy products (excluding butter) | 15.0 | 15.8 | 15.2 | 13.1 |
| Meat, poultry, and game | 17.9 | 19.2 | 21.1 | 22.4 |
| Fish | 3.2 | 3.4 | 3.1 | 3.5 |
| Eggs | 7.5 | 6.4 | 5.7 | 5.7 |
| Fats and oils | 8.9 | 8.0 | 7.2 | 6.6 |
| Sugar and other sweets | 4.2 | 4.0 | 3.8 | 3.5 |
| Potatoes | 5.4 | 4.3 | 4.0 | 3.6 |
| Pulses and nuts | 1.0 | 1.1 | .9 | 1.1 |
| Tomatoes and citrus fruit | 4.9 | 5.2 | 5.1 | 6.0 |
| Fruit other than citrus | 5.6 | 7.4 | 8.5 | 8.7 |
| Leafy, green, and yellow vegetables | 5.1 | 6.2 | 6.1 | 6.9 |
| Other vegetables | 4.3 | 4.1 | 4.5 | 5.4 |
| Grain products | 6.8 | 5.6 | 5.2 | 4.8 |
| Bakery products | 3.6 | 2.6 | 2.8 | 2.3 |
| Beverage materials | 2.9 | 2.5 | 2.5 | 2.3 |
| Canned soups, jams, jellies, marmalade, and pickles | 2.2 | 2.8 | 3.1 | 3.0 |
| Miscellaneous | 1.5 | 1.4 | 1.2 | 1.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 |
| | - dollars - | | | |
| Value of food per food-cost unit per week | 2.45 | 3.49 | 4.34 | 5.90 |

## SUMMARY

1. Farm families in Nova Scotia during 1945-46 consumed larger quantities per person than did Canadians on the average of most of the principal classes of food. Among the 12 classes there were only two, namely meats and sugars and syrups, in which they were substantially below the Canadian level of consumption.

2. Quantities eaten per person of certain food classes varied quite sharply by season. Consumption rates of both leafy, green, and yellow and of "other" vegetables were much higher in the late summer than in the other two periods of the survey, February to April, and May, while those of meats, sugars and syrups, pulses and nuts, and fruit other than citrus were highest in the winter season. Eggs and potatoes were the only food classes to have distinctly high rates of consumption in the May as compared with the other survey periods.

3. The weighted average value of the diet was $3.48 per person per week. Among the 16 food classes used for analysis of value of the food consumed, two, namely, meat and dairy products, represented 17 and 15 per cent, respectively, of the total, but none of the others exceeded eight per cent.

4. Home production accounted for approximately half of all food consumed and over 80 per cent of the value of each of the following food classes: potatoes, poultry and game, eggs, both the chief classes of vegetables, and dairy products. In terms of total value of home produced food the most important classes were: dairy products, meat, eggs and leafy, green, and yellow vegetables, each of which accounted for at least ten per cent of the total. Dairy products were worth 25 per cent and meat 15 per cent.

5. The difference between retail value in urban markets and sale value at the farm for the home produced food consumed was 78 cents per person per week or approximately 21 per cent of the value of all the food consumed.

6. The value of home preserved foods amounted to 25 cents per person per week; about 90 per cent of such foods were preserved from home grown produce.

7. Among survey areas, Halifax County had the least satisfactory diet. In Richmond County the consumption of leafy, green, and yellow vegetables was particularly low.

8. Families on the vegetable and fruit, dairy and mixed farms appear to have had very satisfactory diets. Families on farms of the other three types represented had relatively low rates of consumption of fruit and vegetables in general which may have led to deficiencies in some vitamins and minerals. The potato farm families were also below average in the quantities consumed of most other classes of food.

9. There was little variation in the retail value of the diet related to the proportion of all food consumed produced at home. While consumption of

milk solids, eggs, and both major classes of vegetables increased that of meat, fish, sugars and syrups and citrus fruit declined as the percentage of the value of all food consumed which was produced at home increased.

10. Of all classes based on number and age of children families with no children or one or two young children had diets of the highest retail value. The largest families, which were those with more than two children of which at at least one was in each age group, not only had the lowest cost diet per food-cost unit but also ate less than average of almost every class of food. Their rates of consumption of meat, tomatoes, fruit other than citrus, and vegetables classed as "other" were especially low.

11. The extent of education of the heads of the household appeared to influence the consumption of fluid whole milk which increased sharply as the educational level rose. Other variations in the diet related to education were less marked.

12. As might be expected, the quality of the diet of families of "high"economic level was considerably more satisfactory than that of families of "low" economic level. Consumption of fluid whole milk, poultry, eggs, pulses, citrus fruit, fruit other than citrus, and leafy, green, and yellow vegetables tended to increase as the economic level rose.

13. The wide variation in the value of the diet reported per food-cost unit among individual households was closely associated with a corresponding variation in the quantities consumed of most major classes of foods. Nevertheless, differences were narrower in the consumption of staple foods rich in carbohydrates as well as of dairy products and eggs, than of meats, fruits and vegetables.

## APPENDIX

Seasonal Weighting.- The averages presented in Table 13 are built up from data secured from three separate sets of reports of one week's food consumption by the farm households participating in the survey. When the families were visited the consumption of food reported was that of the week ending the day before the interview. Interviews were first made from August 15 to October 5, 1945. For the second period all reports but one covered weeks ending between February 3 and April 10, 1946. (One was not completed until April 22). In that period 54 per cent of the original families returned the schedules which were sent to them by mail. Interviews were again made from May 3 to 30. For the purpose of combining the consumption figures of the three periods to provide an average, weightings were suggested by Dr. W.V. Longley of the Nova Scotia Department of Agriculture. They were prompted chiefly by consideration of differing conditions of production, presumed to affect consumption on farms, in the different areas. The survey areas were thus given the following weights, representing the number of months which the survey periods were thought to represent in each area:

| | Season | | |
|---|---|---|---|
| | 1 | 2 | 3 |
| Cumberland | 5 | 5 | 2 |
| Halifax | 5 | 5 | 2 |
| Kings | 6 | 4 | 2 |
| Queens-Lunenburg | 4 | 5 | 3 |
| Richmond | 3 | 6 | 3 |

To obtain weights for the province as a whole and for groups other than survey areas the above figures were combined in proportion to the number of households from each area included in the survey in the first period. The resulting weights were 4.5, 5.0 and 2.5.

Consumption by Season.- In the first season information for farm and family classification was obtained and the time of interview was necessarily longer than in the third. Thus, since the number of interviewers was limited, the survey period extended over nearly two months. During that time the survey period extended over nearly two months. During that time the survey party completed one area before moving to another. As the availability on the farms of various products, particularly vegetables and apples, was changing rapidly, their reported rates of consumption in the different areas were affected by the dates of survey as well as by factors associated with the areas. Average figures for consumption of the products most affected, therefore, have been omitted from Table 13, and seasonal figures presented in Table 14. Data for the second and third seasons cast some light on the extent to which that of the first season may have been affected by the time of survey. Reported consumption rates for some classes of households are much less influenced by month of report in the first season than for others, as may be seen from the percentages reporting in each month.

Class of Household.- All the households were classified according to the following criteria: 1) survey area; 2) type of farm; 3) proportion of

food produced at home in terms of retail value; 4) number and age of children; 5) education of the male and female heads of the households; 6) economic level; 7) value of food per food-cost unit per week. Not all the households are represented in each of the classifications shown in Tables 13 and 14 since classes containing less than ten households in any season were omitted. The non-commercial higher income group was included, although only nine families of this class reported in the winter since the numbers in the other two seasons were relatively high.

Unit of Consumption.- The food requirements of persons of different age, weight, sex and occupation are not equal. Consequently, in the groups of survey households, especially those classified on the basis of number and age of children equal numbers of individual did not have equal food requirements. As, with the notable exception of milk, an increased need for food of one kind is usually associated with increased need for others, the total cost of the required food of an individual reflects his requirement for most foods. Accordingly, to compare groups of households on an equitable basis a unit of consumption, the "food-cost unit" which is equivalent to a moderately active man was used. The Bureau of Home Economics of the United States Department of Agriculture developed the following scale of values for different individuals in terms of the value of the food of a moderately active man, the "food-expenditure unit".1/ The"food-cost unit" of Tables 13 and 14 is that food-expenditure unit, and the following is the scale of conversion from persons to food-cost units:

| Age Group: | Equivalents in expenditure units: Men and boys | Women and girls |
|---|---|---|
| 75 years or older:a/ | | |
| moderately active | 0.90 | 0.85 |
| active | .95 | .90 |
| 20-74 years: | | |
| moderately active b/ | 1.00 | .92 |
| active | 1.12 | 1.00 |
| 16-19 | 1.14 | 1.01 |
| 14-15 | 1.12 | 1.01 |
| 13 years | 1.07 | .97 |
| 12 years | 1.03 | .93 |
| 11 years | .98 | .90 |
| 10 years | .95 | .88 |
| 9 years | .91 | .84 |
| 8 years | .87 | .79 |
| 7years | .80 | .73 |
| 6 years | .73 | .67 |
| 5 years | .65 | .63 |
| 4 years | .61 | .60 |
| 3 years | .59 | .58 |
| 2 years | .55 | .55 |
| 1 year | .54 | .54 |
| Under 1 | .51 | .51 |

a/ Including adult invalids of any age.
b/ 0.95 if working less than 20 hours weekly.

1/ United States Department of Agriculture. Bureau of Home Economics. Family Economics Division. Consumer Purchases Study Farm Series. Family Food Consumption and Dietary Levels Five Regions. p. 372. Washington, D.C., 1941 (Misc. Pub. 405). (Published in co-operation with the Work Projects Administration).

Table 15 may be used to convert approximately the data given in Tables 13 and 14 to a per person basis. For example, 2.08 pounds of meat were consumed per food-cost unit per week by households containing no children; their consumption per person was approximately $\frac{2.08}{.96}$ pounds = 2.17 pounds.

Food Conversion Factors.- In order to group foods into a few general classes it was necessary to convert the weights of foods of the same type to a common basis. That used for each class is shown on page 3 and indicated by footnotes in the tables. The conversion factors used for dairy products except ice cream, poultry, game, fats and oils except very fat salt pork, honey, syrups, canned tomatoes, tomato juice, canned fruits and fruit juices, and canned vegetables were obtained from a report of the Combined Food Board.1/ For meats except beef sausage, sugars in many manufactured foods, nuts except peanuts, grain products and beverages, United States Department of Agriculture conversion factors were used.2/ For the remaining foods conversion factors were obtained from Canadian Government sources.

Classification of Vegetables.- The two main classes of vegetables, "leafy, green, and yellow" and "other" are separated roughly on the basis of their pro-vitamin A content. In this report the former class, providing most vitamin A, includes: Asparagus, green beans, beet tops, broccoli, brussels sprouts, cabbage, carrots, chinese cabbage, green celery, wild greens, kale, lettuce, green onions, parsley, green peas, peppers, pumpkin, sauerkraut, spinach, yellow squash, and swiss chard. "Other" vegetables include some which are green or yellow in appearance, e.g., corn, cucumbers, and turnips. Dried peas and beans, since they are pulses, are excluded from the main groups.

Classification of Grain Products.- The working definitions used by the Nutrition Division, Department of National Health and Welfare are as follows: refined, less than 0.4 mg. thiamine per 1,000 calories; whole grain, at least 0.4 mg. thiamine per 1,000 calories. The term "cereals" in this report denotes grain products other than flours. Such cereals are classified not only as "refined" or"whole grain" but also as "to cook" and "prepared".

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1/ Combined Food Board. Special Joint Committee. Food Consumption Levels in the United States, Canada, and the United Kingdom. United States Department of Agriculture. Production and Marketing Administration Washington, D.C., 1946. (Third Report).

2/ United States. War Food Administration. Office of Distribution. Conversion Factors and Weights and Measures for Agricultural Commodities and Their Products. Section A - Conversion Factors. Washington, D.C. March, 1944.

Table 13.- Weights a/b/of Foods Consumed per Food-Cost Unit c/ per Week by Certain Classes of Nova Scotia Farm Households, 1945-46

| | Class of Household | Average Number of Households per Season | DAIRY PRODUCTS (Excluding Butter) d/ | Fluid Whole Milk | Fluid Cream | Skim and Butter-milk | Whole Milk Canned | Cheese | MEATS e/ | Beef e/ | Pork, Excluding Lard e/ | POULTRY, GAME and FISH f/ | Poultry g/ | Fish f/ | EGGS | FATS and OILS h/ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | - number - | - pounds - | | | | | | | | | | | | | |
| 1 | Nova Scotia | 193 | 1.71 | 9.83 | .76 | 1.06 | .10 | .14 | 1.89 | 1.25 | .50 | .78 | .28 | .62 | .81 | .67 |
| | Survey Area | | | | | | | | | | | | | | | |
| 2 | Cumberland | 31 | 1.67 | 8.84 | 1.01 | 1.09 | .08 | .13 | 1.71 | 1.19 | .45 | .67 | .45 | .41 | .77 | .63 |
| 3 | Halifax | 21 | 1.71 | 12.40 | .24 | .02 | .04 | .08 | 1.83 | 1.46 | .28 | .42 | .15 | .34 | .85 | .54 |
| 4 | Kings | 50 | 1.74 | 9.84 | .83 | .96 | .14 | .13 | 1.72 | 1.21 | .44 | .67 | .32 | .50 | .79 | .62 |
| 5 | Queens-Lunenburg | 48 | 1.70 | 8.96 | .84 | 1.87 | .09 | .13 | 1.75 | 1.05 | .63 | .68 | .22 | .54 | .83 | .74 |
| 6 | Richmond | 42 | 1.67 | 9.79 | .73 | .95 | .05 | .17 | 2.37 | 1.40 | .63 | 1.24 | .29 | 1.08 | .80 | .73 |
| | Type of Farm | | | | | | | | | | | | | | | |
| 7 | Potato | 13 | 1.77 | 10.59 | .87 | .53 | .07 | .10 | 1.31 | 1.05 | .23 | .58 | .17 | .49 | .70 | .54 |
| 8 | Vegetable and Fruit | 28 | 1.67 | 9.72 | .73 | .65 | .17 | .14 | 2.10 | 1.37 | .58 | .82 | .42 | .59 | .88 | .66 |
| 9 | Dairy | 45 | 1.72 | 10.61 | .65 | .66 | .05 | .14 | 1.94 | 1.24 | .57 | .75 | .33 | .55 | .78 | .66 |
| 10 | Mixed | 28 | 1.77 | 10.62 | .73 | 1.02 | .03 | .13 | 1.95 | 1.24 | .50 | .69 | .25 | .55 | .88 | .68 |
| 11 | Non-commercial, higher income | 17 | 1.59 | 8.88 | .63 | .97 | .20 | .21 | 2.19 | 1.36 | .69 | 1.15 | .04 | 1.13 | .74 | .79 |
| 12 | Non-commercial, low income n/ | 27 | 1.64 | 8.68 | .80 | 1.86 | .13 | .13 | 1.72 | 1.09 | .42 | .91 | .14 | .82 | .76 | .67 |
| | Proportion of Home-Produced Food | | | | | | | | | | | | | | | |
| 13 | Less than 40 per cent | 48 | 1.36 | 8.40 | .37 | .31 | .24 | .13 | 1.99 | 1.42 | .48 | .75 | .14 | .66 | .73 | .64 |
| 14 | 40 - 59 per cent | 88 | 1.76 | 10.60 | .70 | .84 | .08 | .15 | 1.88 | 1.29 | .50 | .80 | .21 | .64 | .82 | .68 |
| 15 | 60 per cent or more | 57 | 1.88 | 9.55 | 1.18 | 2.05 | .03 | .14 | 1.79 | 1.02 | .59 | .74 | .36 | .54 | .85 | .67 |
| | Number and Age of Children o/ | | | | | | | | | | | | | | | |
| 16 | None | 71 | 1.57 | 8.10 | .91 | 1.40 | .08 | .14 | 2.08 | 1.39 | .59 | .89 | .35 | .69 | .81 | .75 |
| 17 | 1 or 2 under 13 | 44 | 1.84 | 10.63 | .84 | 1.25 | .05 | .13 | 2.02 | 1.33 | .53 | .88 | .33 | .68 | .86 | .66 |
| 18 | More than 2 under 13 | 20 | 1.98 | 11.79 | .92 | .83 | .16 | .11 | 1.99 | 1.20 | .64 | .72 | .26 | .56 | .85 | .65 |
| 19 | 1 or 2, 13 or over | 18 | 1.79 | 11.77 | .56 | .20 | .03 | .14 | 1.80 | 1.27 | .38 | .78 | .31 | .61 | .85 | .64 |
| 20 | More than 2, at Least 1 in Each Age Group | 33 | 1.56 | 9.13 | .56 | 1.14 | .14 | .11 | 1.64 | 1.09 | .38 | .66 | .19 | .55 | .74 | .63 |
| | Education Rating | | | | | | | | | | | | | | | |
| 21 | 0 and 1 | 23 | 1.53 | 7.86 | .83 | .94 | .22 | .18 | 2.19 | 1.26 | .69 | .94 | .19 | .83 | .78 | .70 |
| 22 | 2 | 91 | 1.63 | 9.52 | .71 | 1.14 | .06 | .11 | 1.80 | 1.24 | .50 | .73 | .24 | .59 | .74 | .66 |
| 23 | 3 and higher | 65 | 1.94 | 11.43 | .85 | 1.01 | .09 | .15 | 1.91 | 1.30 | .44 | .75 | .38 | .53 | .93 | .70 |
| | Economic Level | | | | | | | | | | | | | | | |
| 24 | Low | 49 | 1.71 | 9.69 | .77 | 1.10 | .11 | .16 | 1.93 | 1.26 | .59 | .95 | .17 | .85 | .75 | .70 |
| 25 | Medium | 50 | 1.60 | 8.89 | .77 | 1.34 | .09 | .11 | 1.76 | 1.17 | .48 | .73 | .31 | .56 | .77 | .62 |
| 26 | High | 48 | 1.99 | 11.96 | .82 | .76 | .10 | .16 | 2.02 | 1.34 | .46 | .72 | .40 | .48 | .95 | .69 |
| | Value of Food per Food-Cost Unit per Week | | | | | | | | | | | | | | | |
| 27 | Less than $3.00 | 66 | 1.28 | 8.06 | .37 | .78 | .08 | .07 | 1.26 | .89 | .32 | .53 | .08 | .47 | .66 | .52 |
| 28 | $3.00 - $3.99 | 61 | 1.82 | 11.02 | .64 | 1.05 | .10 | .14 | 1.89 | 1.29 | .48 | .75 | .21 | .64 | .80 | .68 |
| 29 | $4.00 - $4.99 | 38 | 2.00 | 10.74 | 1.22 | 1.07 | .07 | .17 | 2.34 | 1.55 | .55 | .94 | .45 | .68 | .88 | .74 |
| 30 | $5.00 or More | 27 | 2.21 | 10.44 | 1.48 | 1.91 | .17 | .24 | 3.00 | 1.76 | .99 | 1.39 | .79 | .95 | 1.16 | .95 |

Table 13.- Weights a/b/ of Foods Consumed per Food-Cost Unit c/ per Week by Certain Classes of Nova Scotia Farm Households, 1945-46 - Continued

| Class of Household | Butter | SUGARS and SYRUPS i/ | Sugars j/ | Molasses | POTATOES | Pulses | TOMATOES k/ and CITRUS FRUIT | Citrus Fruit Fresh | Dried Fruit | GRAIN PRODUCTS | Flours l/ | Bread Bought | Cereals Refined m/ | Cereals Whole Grain m/ | Cereals To Cook m/ | Cereals Prepared m/ | Tea and Coffee |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | - pounds - | | | | | | | | | | | | | | | | |
| 1 Nova Scotia | .52 | 1.09 | .53 | .44 | 5.74 | .26 | 1.77 | .96 | .36 | 4.76 | 3.99 | .31 | .32 | .45 | .58 | .19 | .12 |
| Survey Area | | | | | | | | | | | | | | | | | |
| 2 Cumberland | .50 | 1.15 | .52 | .39 | 5.23 | .31 | 1.91 | .94 | .32 | 5.15 | 3.08 | .44 | .25 | .57 | .61 | .21 | .13 |
| 3 Halifax | .43 | 1.04 | .51 | .42 | 5.54 | .24 | 1.22 | .74 | .33 | 4.59 | 3.87 | .53 | .28 | .44 | .54 | .18 | .10 |
| 4 Kings | .50 | 1.02 | .49 | .41 | 5.66 | .26 | 1.84 | 1.08 | .31 | 4.44 | 3.70 | .30 | .30 | .44 | .51 | .23 | .10 |
| 5 Queens-Lunenburg | .49 | 1.03 | .45 | .49 | 6.47 | .32 | 1.73 | .97 | .41 | 4.70 | 4.07 | .15 | .30 | .33 | .45 | .18 | .11 |
| 6 Richmond | .61 | 1.24 | .69 | .50 | 5.43 | .22 | 1.93 | .96 | .42 | 5.04 | 4.12 | .33 | .41 | .51 | .76 | .16 | .14 |
| Type of Farm | | | | | | | | | | | | | | | | | |
| 7 Potato | .46 | .87 | .42 | .43 | 5.21 | .23 | 1.37 | 1.10 | .35 | 3.83 | 3.10 | .06 | .23 | .50 | .49 | .24 | .07 |
| 8 Vegetable and Fruit | .52 | 1.06 | .53 | .33 | 5.83 | .26 | 2.53 | 1.16 | .30 | 4.34 | 3.64 | .40 | .34 | .36 | .49 | .21 | .13 |
| 9 Dairy | .51 | 1.16 | .50 | .44 | 5.22 | .25 | 1.79 | 1.05 | .37 | 5.16 | 4.35 | .30 | .31 | .50 | .63 | .18 | .12 |
| 10 Mixed | .54 | 1.18 | .51 | .62 | 6.09 | .30 | 1.85 | .94 | .44 | 4.64 | 3.92 | .31 | .29 | .43 | .52 | .20 | .10 |
| 11 Non-commercial, higher income | .58 | 1.11 | .69 | .35 | 6.26 | .23 | 1.54 | .92 | .40 | 5.00 | 4.14 | .17 | .42 | .44 | .66 | .20 | .14 |
| 12 Non-commercial, low income | .52 | 1.01 | .61 | .50 | 5.43 | .25 | 1.49 | .87 | .31 | 4.91 | 4,13 | .47 | .33 | .45 | .60 | .18 | .12 |
| Proportion of Home-Produced Food n/ | | | | | | | | | | | | | | | | | |
| 13 Less than 40 per cent | .51 | 1.17 | .52 | .48 | 5.34 | .28 | 1.93 | 1.17 | .42 | 4.72 | 3.95 | .48 | .35 | .42 | .57 | .20 | .13 |
| 14 40 - 59 per cent | .53 | 1.11 | .57 | .41 | 5.33 | .26 | 1.79 | .96 | .36 | 4.91 | 4.11 | .30 | .33 | .47 | .61 | .19 | .12 |
| 15 60 per cent or more | .51 | .99 | .47 | .44 | 6.29 | .27 | 1.53 | .71 | .30 | 4.59 | 3.89 | .19 | .27 | .43 | .53 | .17 | .10 |
| Number and Age of Children o/ | | | | | | | | | | | | | | | | | |
| 16 None | .55 | 1.11 | .47 | .50 | 5.68 | .28 | 1.85 | .97 | .37 | 4.94 | 4.21 | .39 | .28 | .45 | .59 | .14 | .16 |
| 17 1 or 2 under 13 | .52 | 1.12 | .55 | .41 | 5.69 | .27 | 1.97 | 1.19 | .39 | 4.67 | 3.81 | .36 | .36 | .50 | .62 | .24 | .13 |
| 18 More than 2 under 13 | .50 | 1.14 | .62 | .40 | 5.23 | .23 | 1.92 | .88 | .35 | 4.27 | 3.49 | .30 | .38 | .40 | .55 | .23 | .09 |
| 19 1 or 2, 13 or over | .49 | 1.06 | .54 | .33 | 5.78 | .29 | 1.42 | .80 | .41 | 4.77 | 3.98 | .39 | .32 | .47 | .61 | .18 | .10 |
| 20 More than 2 at Least 1 in Each Age Group | .53 | 1.09 | .55 | .47 | 6.14 | .26 | 1.59 | .88 | .31 | 4.87 | 4.15 | .17 | .27 | .45 | .54 | .18 | .09 |
| Education Rating | | | | | | | | | | | | | | | | | |
| 21 0 and 1 | .61 | 1.21 | .65 | .44 | 6.68 | .25 | 1.90 | .99 | .33 | 5.12 | 4.35 | .24 | .32 | .45 | .63 | .14 | .12 |
| 22 2 | .51 | 1.05 | .50 | .47 | 5.78 | .27 | 1.68 | .93 | .38 | 4.91 | 4.12 | .32 | .32 | .47 | .60 | .19 | .12 |
| 23 3 and higher | .51 | 1.12 | .53 | .41 | 5.26 | .27 | 1.93 | 1.02 | .36 | 4.45 | 3.69 | .29 | .32 | .44 | .55 | .21 | .11 |
| Economic Level | | | | | | | | | | | | | | | | | |
| 24 Low | .55 | 1.14 | .60 | .50 | 6.06 | .24 | 1.87 | .91 | .34 | 5.18 | 4.27 | .25 | .41 | .50 | .72 | .19 | .13 |
| 25 Medium | .50 | 1.06 | .51 | .44 | 5.49 | .25 | 1.70 | .94 | .42 | 4.68 | 3.94 | .23 | .28 | .46 | .56 | .18 | .10 |
| 26 High | .53 | 1.10 | .52 | .39 | 5.81 | .34 | 1.96 | 1.07 | .36 | 4.84 | 4.07 | .43 | .29 | .48 | .57 | .20 | .12 |
| Value of Food per Food-Cost Unit per Week | | | | | | | | | | | | | | | | | |
| 27 Less than $3.00 | .43 | .89 | .47 | .40 | 5.07 | .21 | 1.11 | .68 | .26 | 4.17 | 3.59 | .28 | .22 | .36 | .44 | .14 | .09 |
| 28 $3.00 - $3.99 | .52 | 1.08 | .53 | .44 | 5.69 | .27 | 1.72 | .96 | .32 | 4.67 | 3.93 | .23 | .31 | .43 | .55 | .19 | .11 |
| 29 $4.00 - $4.99 | .57 | 1.24 | .58 | .43 | 5.94 | .22 | 2.07 | 1.18 | .46 | 5.19 | 4.26 | .34 | .39 | .54 | .72 | .21 | .14 |
| 30 $5.00 or More | .70 | 1.50 | .66 | .61 | 7.69 | .43 | 3.44 | 1.53 | .63 | 6.06 | 4.95 | .52 | .49 | .62 | .79 | .32 | .18 |

a/ Retail weight except where otherwise stated.
b/ Seasonal averages weighted as follows: August-September, 4.5; February-April, 5; May, 2.5. See page 34 for special weightings for survey areas.
c/ Moderately active man.
d/ Milk solids.
e/ Carcass weight. Edible weight of offal included in "Meats". Very fat salt pork excluded.
f/ Edible weight.
g/ Dressed, not drawn.
h/ Fat content. Very fat salt pork included.
i/ Sugar content. Including that in bakery products, preserves, candy, and soft drinks.
j/ Purchased as sugar, excluding amounts in foods taken from storage.
k/ Fresh equivalent weight.
l/ Including flour in purchased bakery products.
m/ Included in refined and whole grain cereals.
n/ In terms of retail value.
o/ Eighteen years of age or under.

Table 14.- Weights a/ of Foods Consumed per Food-Cost Unit b/ per Week, by Class of Household, by Season c/, Nova Scotia Farm Households, 1945-46

| | | Number of Households | | | Distribution of Reports by Month | | | Tomatoes d/ | | | FRUIT OTHER than CITRUS d/ | | | Apples | | | Other | | | LEAFY GREEN and YELLOW VEGETABLES d/ | | | Fresh | | | OTHER VEGETABLES d/ | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | | | | Fresh | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | Season | | | | | | | | | | | | | | |
| | | 1 | 2 | 3 | 1 | | | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 |
| | | - number - | | | - per cent - | | | - pounds - | | | | | | | | | | | | | | | | | | | | |
| 1 | Nova Scotia | 237 | 128 | 213 | 38 | 39 | 23 | .82 | .77 | .59 | 2.64 | 3.72 | 2.18 | .93 | 1.03 | .22 | .60 | .13 | .23 | 3.85 | 2.67 | 1.64 | 3.73 | 1.95 | 1.18 | 3.60 | 2.04 | 1.68 |
| | Survey Area | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2 | Cumberland | 37 | 22 | 34 | 0 | 0 | 100 | 1.17 | .79 | .55 | 2.84 | 3.77 | 1.91 | 1.52 | 1.08 | .07 | .48 | .17 | .31 | 2.40 | 2.23 | 1.26 | 2.28 | 1.54 | .78 | 2.83 | 2.15 | 1.37 |
| 3 | Halifax | 26 | 15 | 23 | 100 | 0 | 0 | .75 | .23 | .31 | 2.63 | 3.20 | 1.98 | .65 | .82 | .09 | 1.10 | .03 | .13 | 4.03 | 1.56 | 1.02 | 3.97 | 1.17 | .64 | 1.75 | 1.56 | 1.45 |
| 4 | Kings | 65 | 32 | 54 | 100 | 0 | 0 | .66 | .87 | .66 | 2.02 | 4.01 | 2.34 | .39 | 1.30 | .51 | .52 | .10 | .21 | 5.81 | 3.17 | 2.36 | 5.70 | 2.15 | 1.80 | 2.53 | 1.77 | 1.88 |
| 5 | Queens-Lunenburg | 57 | 32 | 54 | 0 | 100 | 0 | .95 | .52 | .58 | 2.85 | 3.93 | 2.09 | .86 | .93 | .14 | .71 | .09 | .29 | 3.81 | 4.11 | 2.27 | 3.74 | 3.23 | 1.75 | 6.71 | 2.44 | 1.83 |
| 6 | Richmond | 52 | 27 | 48 | 0 | 67 | 33 | .71 | 1.08 | .68 | 3.13 | 3.44 | 2.34 | 1.46 | .89 | .11 | .43 | .22 | .20 | 2.16 | 1.66 | .78 | 1.97 | 1.23 | .44 | 3.61 | 2.22 | 1.68 |
| | Type of Farm | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 7 | Potato | 15 | 10 | 13 | 87 | 7 | 6 | .16 | .19 | .50 | 1.52 | 2.89 | 1.74 | .19 | .66 | .24 | .16 | .09 | .05 | 5.30 | 1.80 | 2.36 | 5.15 | 1.13 | 1.73 | 1.95 | 1.11 | 1.88 |
| 8 | Vegetable and Fruit | 37 | 18 | 30 | 89 | 11 | 0 | 1.35 | 1.44 | 1.02 | 2.41 | 4.00 | 2.61 | .67 | 1.37 | .48 | .51 | .22 | .24 | 4.66 | 3.54 | 2.46 | 4.55 | 2.42 | 1.93 | 2.78 | 2.38 | 2.00 |
| 9 | Dairy | 55 | 31 | 49 | 31 | 31 | 38 | .78 | .76 | .43 | 3.09 | 4.52 | 1.85 | 1.16 | 1.28 | .22 | .83 | .17 | .27 | 3.43 | 2.48 | 1.32 | 3.31 | 1.72 | .85 | 3.57 | 2.01 | 1.41 |
| 10 | Mixed | 32 | 20 | 31 | 28 | 56 | 16 | 1.00 | .78 | .44 | 3.24 | 4.50 | 2.47 | 1.33 | 1.09 | .30 | .79 | .11 | .29 | 5.73 | 3.32 | 1.78 | 5.65 | 2.62 | 1.31 | 4.87 | 2.81 | 1.70 |
| 11 | Non-commercial, Higher Income | 22 | 9 | 19 | 9 | 59 | 32 | .70 | .53 | .52 | 2.34 | 3.38 | 1.97 | 1.06 | 1.08 | .05 | .34 | .04 | .13 | 2.10 | 2.63 | .94 | 1.96 | 1.75 | .62 | 3.27 | 1.23 | 1.64 |
| 12 | Non-commercial, Low Income | 33 | 18 | 30 | 27 | 58 | 15 | .42 | .71 | .67 | 1.90 | 3.14 | 1.98 | .56 | .91 | .11 | .56 | .17 | .16 | 3.18 | 1.87 | 1.08 | 3.06 | 1.48 | .73 | 3.51 | 1.84 | 1.31 |
| | Proportion of Food Home Produced e/ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 13 | Less than 40 per cent | 32 | 34 | 79 | 47 | 28 | 25 | .68 | .69 | .76 | 2.32 | 3.68 | 2.23 | .53 | .73 | .20 | .42 | .10 | .24 | 2.93 | 2.09 | 1.77 | 2.70 | 1.50 | 1.31 | 2.62 | 1.84 | 1.69 |
| 14 | 40 - 59 per cent | 108 | 60 | 95 | 40 | 36 | 24 | .78 | .86 | .50 | 2.50 | 3.87 | 2.16 | .75 | 1.12 | .22 | .56 | .18 | .22 | 3.42 | 2.92 | 1.61 | 3.30 | 2.18 | 1.15 | 3.21 | 1.91 | 1.71 |
| 15 | 60 per cent or More | 97 | 34 | 39 | 34 | 45 | 21 | .90 | .69 | .36 | 2.90 | 3.47 | 2.13 | 1.26 | 1.18 | .25 | .70 | .07 | .26 | 4.64 | 2.81 | 1.44 | 4.57 | 1.98 | .97 | 4.33 | 2.53 | 1.57 |
| | Number and Age of Children f/ | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 16 | None | 87 | 48 | 79 | 32 | 47 | 21 | .85 | .86 | .69 | 3.53 | 4.05 | 2.57 | 1.34 | 1.36 | .32 | .93 | .14 | .29 | 3.77 | 3.48 | 1.75 | 3.65 | 2.65 | 1.26 | 3.95 | 2.62 | 1.95 |
| 17 | 1 or 2 under 13 | 58 | 28 | 45 | 45 | 33 | 22 | .76 | .80 | .58 | 2.84 | 3.94 | 2.44 | 1.15 | .98 | .31 | .61 | .16 | .28 | 4.37 | 2.63 | 1.82 | 4.21 | 1.88 | 1.24 | 3.77 | 1.96 | 1.64 |
| 18 | More than 2 under 13 | 22 | 16 | 21 | 36 | 41 | 23 | 1.23 | 1.00 | .62 | 2.15 | 3.76 | 1.94 | .61 | 1.07 | .13 | .49 | .11 | .20 | 3.18 | 2.12 | 1.45 | 3.11 | 1.27 | 1.09 | 4.24 | 1.68 | 1.61 |
| 19 | 1 or 2, 13 or over | 20 | 11 | 22 | 55 | 30 | 15 | .60 | .52 | .59 | 2.00 | 4.59 | 2.73 | .45 | 1.25 | .40 | .51 | .20 | .30 | 3.72 | 2.98 | 1.69 | 3.64 | 2.36 | 1.35 | 2.44 | 2.52 | 2.04 |
| 20 | More than 2, at Least 1 in Each Age Group | 38 | 21 | 39 | 42 | 24 | 34 | .69 | .64 | .49 | 1.95 | 2.99 | 1.63 | .70 | .66 | .04 | .32 | .10 | .14 | 3.84 | 2.17 | 1.49 | 3.74 | 1.60 | 1.08 | 2.67 | 1.63 | 1.42 |
| | Education Rating | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 21 | 0 and 1 | 27 | 18 | 25 | 22 | 41 | 37 | 1.09 | .82 | .63 | 3.04 | 3.72 | 1.80 | 1.59 | 1.12 | .06 | .57 | .17 | .12 | 3.45 | 2.17 | 1.19 | 3.31 | 1.41 | .86 | 3.37 | 2.05 | 1.51 |
| 22 | 2 | 113 | 60 | 99 | 41 | 41 | 18 | .75 | .75 | .52 | 2.54 | 3.45 | 2.21 | .84 | .86 | .14 | .57 | .15 | .20 | 4.20 | 2.90 | 1.68 | 4.09 | 2.27 | 1.22 | 3.80 | 1.97 | 1.70 |
| 23 | 3 and Higher | 79 | 43 | 73 | 43 | 30 | 27 | .91 | .86 | .65 | 2.74 | 4.19 | 2.41 | .88 | 1.26 | .40 | .72 | .10 | .34 | 3.58 | 2.56 | 1.84 | 3.46 | 1.72 | 1.29 | 3.59 | 2.14 | 1.80 |
| | Economic Level | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 24 | Low | 59 | 36 | 53 | 29 | 49 | 22 | .97 | .90 | .73 | 2.51 | 3.32 | 2.01 | .95 | .99 | .10 | .52 | .20 | .14 | 3.42 | 2.25 | 1.32 | 3.30 | 1.66 | .93 | 3.14 | 1.96 | 1.72 |
| 25 | Medium | 59 | 38 | 53 | 30 | 41 | 29 | .87 | .70 | .50 | 2.78 | 3.65 | 2.16 | 1.00 | .82 | .10 | .57 | .12 | .22 | 3.25 | 2.46 | 1.66 | 3.17 | 1.76 | 1.28 | 4.42 | 2.05 | 1.67 |
| 26 | High | 60 | 27 | 57 | 43 | 30 | 27 | .86 | .90 | .66 | 2.80 | 4.52 | 2.73 | .96 | 1.52 | .44 | .79 | .14 | .37 | 4.28 | 3.30 | 1.97 | 4.15 | 2.47 | 1.41 | 3.68 | 2.42 | 1.82 |
| | Value of Food per Food-Cost Unit per Week | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 27 | Less than $3.00 | 66 | 37 | 96 | 23 | 53 | 24 | .46 | .34 | .38 | 1.20 | 2.23 | 1.51 | .38 | .38 | .08 | .15 | .06 | .12 | 2.26 | 1.52 | 1.08 | 2.19 | 1.15 | .75 | 2.28 | 1.22 | 1.22 |
| 28 | $3.00 - $3.99 | 78 | 40 | 66 | 41 | 33 | 26 | .92 | .64 | .51 | 2.50 | 3.52 | 2.21 | .83 | 1.29 | .31 | .56 | .05 | .24 | 3.37 | 3.20 | 2.01 | 3.26 | 2.36 | 1.56 | 3.29 | 1.93 | 1.86 |
| 29 | $4.00 - $4.99 | 51 | 29 | 33 | 51 | 31 | 18 | .62 | .97 | .97 | 3.43 | 4.69 | 3.51 | 1.10 | 1.40 | .48 | .99 | .15 | .42 | 4.82 | 2.59 | 2.28 | 4.65 | 1.90 | 1.41 | 3.97 | 2.75 | 2.36 |
| 30 | $5.00 or More | 42 | 22 | 18 | 43 | 36 | 21 | 1.57 | 1.82 | 1.92 | 4.78 | 6.40 | 4.74 | 2.05 | 1.53 | .30 | 1.08 | .44 | .71 | 6.88 | 4.54 | 2.92 | 6.72 | 3.14 | 2.05 | 6.45 | 3.28 | 3.02 |

a/ Retail weight except where otherwise stated.
b/ Moderately active man.
c/ 1) August-September (54 interviews from October 1st to 5th), 1945; 2) February-April, 1946; 3) May, 1946.
d/ Fresh equivalent weight. Fruit in preserves and vegetables in pickles included in their respective classes.
e/ In terms of retail value.
f/ Eighteen years of age or under.